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Worldwide Report

EPIDEMIOLOGY

No. 278

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CONTENTS

HUMAN DISEASES

PRIVATE SECTOR ASKED FOR CARIBBEAN MEDICAL RESEARCH FUNDS

Port-of-Spain TRINIDAD GUARDIAN in English 15 Apr 82 p 1

[Text] Caribbean medical men and Trinidad and Tobago's Minister of Health, Dr. Neville Connell, appealed yesterday to businessmen of the region to help save Caribbean lives.

The appeal was trumpeted at the 27th annual meeting of the Commonwealth Caribbean Medical Research Council (CCMRC) by Dr. Peter Williams, of the Wellcome Trust in the United Kingdom, which regularly helps to fund medical research in the Caribbean and elsewhere. Dr. Williams is a Trinidadian but has been working in the United Kingdom for more than 21 years.

He called for banks, insurance companies, and industrial enterprises who have all profited from the favourable economic conditions of the last 30 years to make funds available now to sponsor medical research in the region where many easily preventible diseases are still sending to their deaths "appreciable" numbers of the population.

Dr. Connell reiterated the call in his own address.

He said: "An intensification of our efforts in technical, industrial and agricultural research is needed, not least in order to enable us to meet the challenges with which the petroleum industry is presenting us.

"Most of this increased effort should take place in the industrial concerns themselves whether they be State or private enterprises.

"Indeed, industry must be stimulated to invest more of their funds in research and development."

The grim situation that was spelled out in a conference paper underlined the case for private funding--and the situation can get worse.

Dr. David Picou, one of the three scientific secretaries at the conference, in moving the vote of thanks at the opening session (in the Trinidad Hilton) of the four-day conference, noted: "Unless funds are provided it will not be possible for the CCMRC to continue to provide the organisational structure and research in the Caribbean...to enable us to make headway."

Dr. Williams informed the conference that about two thirds of the private money spent in medical research in the Caribbean since 1957 had come from the Wellcome Trust in the United Kingdom.

Much more required to be done and there must be found a way of not only finding the funds but in making sure that funds were in fact spent where they would do the most good.

He said the Caribbean had a problem of what manpower to devote to research at all and what organisations to devote to research; the university could go to the extreme of devoting itself to research, at some expense to teaching, with resulting reduction in manpower later but what "to order" in the way of problems would still remain a problem.

Prof. Picou and Dr. Williams both called attention to the analysis prepared by Prof. George Alleyne: he had been one of the researchers whose work in protein metabolism of the kidney had been funded by the Wellcome Trust and he had produced a paper on the state of medical research in the Caribbean which has received endorsement from the region's Ministers of Health.

Splendid Addition

Sir Hugh Springer, the chairman of the CCMRC, in welcoming the delegates and the audience, remarked that the Mount Hope Complex, being constructed by the Government of Trinidad and Tobago, woudl be "a splendid addition" to the medical faculties of Trinidad and the region and he hoped that when next the Council convened in Trinidad and Tobago(where it had convened previously in 1976) the complex would be finished.

The Rockerfeller Foundation and the Pan American Health Organisation came in for thanks from Sir Hugh on behalf of the people of the region.

A minute's silence, at Sir Hugh's request, was observed in honour of the late Prime Minister of Trinidad and Tobago, Dr. Eric Williams, who, Sir Hugh said, had told him enthusiastically at the 1976 assembly how interested he was in seeing that the Mount Hope Complex become a first-class teaching hospital with physical facilities for research.

Prof. Picou confirmed in his short speech that Mount Hope Complex will be more than just a teaching hospital, that its facilities would enable much interdisciplinary research to be undertaken. He told the conference it would be a dental school, veterinary school, a degree-awarding school of nursing and of pharmacology, and a teaching hospital.

CSO: 5400/7544

MINISTRY OF PUBLIC HEALTH REPORTS ON 1981-1982 PROGRESS

Kabul HEYWAD in Dari 15, 16 Mar 82 pp 3, 7

[15 Mar 82 p 3]

[Text] In reviewing the series of the work performed by the ministries of the Democratic Republic of Afghanistan (DRA), we now turn to the other sectors of the activities of the Ministry of Public Health, beginning with the formulation and implementation of laws, regulations and bills which actually constitute the basis for positive and effective operations of a government agency. The said ministry has taken the following steps in this area:

--Formulation and codification of the constitution of the Scientific Association of Medical Doctors and the formation of the said Association;

--Completion of the legal procedures and the promulgation of the law governing forensic medical institutes;

--Completing the delineation of the functions of the Ministry of Public Health;

--Completing the formulation of the framework of generic medicine;

--Formulation of the regulations of the directorate of preventive medicine (DRA), the high governmental body for sanitary and epidemiological control in DRA;

--Formulation of the regulations of the central branch of health, sanitation and epidemiology education;

--Formulation of the regulations of the central sanitation and epidemiology station;

--Formulation of the regulations of the district sanitation and epidemiology branch;

--Completion of the legal procedures for approving the Law of Public Health;

--Completion of the formulation of the constitution of the blood bank;

--Completion of the formulation of the constitution of pharmaceutical affairs bureau;

--Completion of the formulation of the constitution of the directorate of anti-malaria and anti-lashmania [sic] campaign;

--Completion of the formulation of the bill of paramedical schools examinations;

--Collection of 1,060,000 Afghanis in taxes and royalties due and payable to the government by pharmacies as part of import revenues of the government;

--Other government import revenues in the amount of 518,288 Afghanis;

--Recovery of 181,200 Afghanis from embezzlers;

--Impounding 313 items of illicit medicines;

--Grant of permission to patients to receive treatment abroad: 2,014 individuals;

--The development projects under way in Herat, Konarha and Nangarhar were visited and progress reports on them submitted to the authorities concerned;

--The design of 14 small and fairly large engineering plans were completed;

--Plans for 8 engineering overhauls were completed;

--Sketches for other reparations were obtained and set up for subsequent implementation;

--The construction work of a number of buildings was inspected and supervised;

--The remainder of the work of the central store, except the concrete pouring of its yard, was completed;

--The construction work of the four-room orthopedics workshop block was supervised and partaken;

--The plumbing, rectification of the electricity network, calbe laying, setting the sanitary sinks, repair of water pumps, and start-up of refrigerators and broilers, etc., in the pertinent institutions (in the capital and some provinces) were effected;

--The quarterly allocation of the development projects were made on time on the basis of the current year budget, totalling 153 million Afghanis of government budget and 6.83 million of foreign aid, of which some 143 million Afghanis and 3.31 million, respectively, were spent on the following counts:

--The 200-bed hospital in Nangarhar--98 percent

--The 200-bed hospital in Herat--81 percent

--Nursing dormitory in Herat--47 percent

[16 Mar 82 p 7]

--[Text] Construction of 30 basic health centers--50 percent;

--Construction of 50 basic health centers--48 percent;

--Rural water wupply projects--97 percent;

--Construction of four polyclinics, including one for mother and child care--97 percent on the average;

--Health insurance polyclinic for government employees and wage earners in Kabul--5 percent;

--Construction of the blood bank in Kabul--5 percent;

--Reparation and equipping of the college of medicine in Kabul--98 percent;

--Production of vaccines and serums--99 percent;

--Construction of secondary centers in the provinces--52 percent;

In addition to the allocations for the foregoing projects, a further allocation of 30 million Afghanis was earmarked from the reserve development budget for the construction of the block of the premises of the Ministry of Public Health. It is to be hoped that once the actual allocation is effected, a most useful step would be taken toward the solution of the problem of space in the Ministry of Public Health. From among the above-mentioned projects, the construction work of the hospital in Jalalabad shall soon be completed and the polyclinics in Rahman Mineh and Khayrkhaneh will be completed and commissioned by the end of the year.

--Establishment of the Central Epidemiology and Sanitation Station within the framework of the directorate of preventive medicine and of the department of control of communicable diseases, microbiology, analytical chemistry, sanitation and mass immunization;

--Establishment of the central directorate of health education and publication within the framework of the preventive medicine directorate;

--Establishment of two regional stations of epidemiology and sanitation in Balkh and Nangarhar provinces;

--Opening two quarantine rooms in the central polyclinic and the urban polyclinic of the government salaried employees and wage earners;

--A total of 6,833 persons suffering from acute diarrhea were hospitalized in the quarantines of the child and mother care institute; 951 cases (13.9 percent) were reported to be positive while 2,825 cases were recognized as "exposed," 343 of whom were subjected to epidemiological tests;

--Three well-equipped medical teams were dispatched to Farah and Kandehar provinces on different occasions and distributed 29 prepackaged kits in the provinces at the beginning of the year and also distributed 48,400 packets and boxes of medicine for acute cases of diarrhea by stationary and mobile stations in Kabul;

--Under the program of communicable diseases control, a total of 93 incidences of diphteria were detected and the patients were hospitalized and quarantined in the children's hospital. Also 1,040 contacts were treated and isolated by mobile teams and dipteria anti-toxins were tested on them for tolerance;

--Under the Trachoma Control Program a total of 5,211 persons were examined in schools and industrial institutes for workers, of whom some 903 persons were found to be afflicted with trachoma. These were given the necessary medication;

--Some 16,826 persons were examined for syphilis and 119 positive cases were reported;

--A total of 24,584 specimens of blood, excrements, urine, phlegm, pus, mycosis, water poisoning, medicinal poisoning and food poisoning were sent by the vaccination department to the relevant laboratory sections;

--In the first 9 months of the year some 516 persons were treated in child and mother protection clinics for malnutrition and particularly protein deficiency and allergy;

--A total of 1,899 specimens of urine, blood and food were analyzed by the biochemical sections and the results thereof reported to the relevant sections;

--Typhoid vaccines were tested for tolerance on 400,000 persons and the five combined vaccines were tested for tolerance on 177,847 persons;

--Four week-long training courses were organized for school teachers which were attended by 160 teachers in all;

--A total of 63 small and large factories were inspected and their reports and recommendations on improvements in sanitary conditions were sent to the relevant institutes;

--Some 257 foodstuff samples were tested and the results thereof reported to the agencies concerned;

--Some 74 hotels and restaurants were inspected for sanitary conditions and the hygienic affairs of 11 hospitals in Kabul and seven other hospitals were reviewed for quarantine purposes;

--Some 35 Kabul schools and kindergartens were inspected;

--Numerous specimens of the water of Kabul River were taken and the results thereof sent to the sanitary affairs directorate of Kabul Municipality;

--Under the water resources program covering the water supply network and the reservoir of ice production facilities, qualitative and typical inspections were conducted on 952 specimens, of which some 256 specimens were found to be unsanitary;

--Some 1,012 various anitation-oriented television programs, numerous photographs, official gatherings, and seminars were prepared and organized and cooperation and assistance extended to the departments of the directorates of preventive medicine and of the Ministry of Public Health in the fields of printing, calligraphy, librarianship and technical matters;

--Some 35 staff members of the central station attended a two-month orientation seminar.

9695
CSO: 5400/5320

BRIEFS

MALANJE MEASLES EPIDEMIC--Malanje, 28 Apr (ANGOP)--Fifty four children of both sexes have died this month in the municipal district of Kakuso in the Angola Province of Malanje following an epidemic of measles and other contagious diseases. The epidemic was reported in the areas of Kirimba-Dambi, Lombe and Kizenga located in the municipal district of Kakuso. Meanwhile, the provincial delegation of the Angolan Health Ministry has already instructed two mobile teams to innoculate all young children. The limited participation of the population in previous vaccination campaigns is to be blamed for this epidemic which has struck the Province of Malanje and particularly the municipal district of Kakuso. The local authorities have already taken all steps to bring the situation under control. [Text] [AB282053 Luanda ANGOP in French 1822 GMT 28 Apr 82]

CSO: 5400/5959

MEDICAL RESEARCH ADMINISTRATIVE BODY RECOMMENDED

Perth THE WEST AUSTRALIAN in English 11 Mar 82 p 25

[Text]

CANBERRA: A senior government research body has recommended that a full-time statutory authority be set up to administer medical research in Australia.

The report by the Australian Science and Technology Council suggests htat the statutory authority replace the part-time National Health and Medical Research Council as the body responsible for allocating and overseeing medical research grants.

"Medical research and development in Australia has reached a stage where its proper development with adequate attention to coordination and national and scientific accountability is too onerous a task to be undertaken effectively by a part-time body," the report said.

Tabled in Federal Parliament yesterday it said there was no formal mechanism for the integration of effort for the rational distribution of most of the research funds.

Total expenditure on medical research and development in 1981 was about $80 million and the Federal Government's contribution was $47 million.

The cost of health care in Australia was approaching $9000 million a year, the report said.

Infectious diseases were no longer the main cause of death but significant problems were posed by cancer, heart disease, strokes, alcoholism, drug abuse, rheumatic disorders, allergies, diseases associated with ageing and mental illness.

A soundly-based and well-directed effort in medical research was potentially an important way of achieving cost savings and slowing the rise in the nation's health bill without lowering the standard of community health.

The type of statutory authority proposed could stimulate and expand the activities of medical research centres with a view to establishing a series of selectively-funded centres throughout the country to be known as units.

Fragmentation of research effort was another area of concern canvassed in the report.

It said there was a danger that progress on important health problems would be slowed if the fragmentation of effort was not reduced.

CSO: 5400/7542

BRIEFS

WHOOPING COUGH OUTBREAK--The outbreak of whooping cough in Perth--the biggest in a decade--continues unabated. So far this month there have been five confirmed cases--one a two-month-old baby. Nine children with severe cases of whooping cough were admitted to Princess Margaret Hospital last month. The outbreak started late last year and peaked in January, when 19 cases were confirmed at the hospital. Only the most severe cases are admitted. Many children are treated at home. PMH's director of pathology, Dr Peter Masters, yesterday urged parents to keep their children's immunisation programme up to date. He said that only if a baby was really sick should immunisation be postponed. [Perth THE WEST AUSTRALIAN in English 20 Mar 82 p 9]

GOLDEN STAPH OUTBREAK--Sydney Hospital has had to close an intensive-care ward because of infection by the deadly drug-resistant germ known as golden staph. The chief executive officer of the hospital, Mr Tom Lindsay, confirmed yesterday that a five-bed intensive care ward had been closed last Friday after it was found to be infected by methicillin-resistant staphylococus aureus (MRSA). Golden staph has been linked to 100 deaths in Victoria and is widespread in Queensland. It invades wounds, ulcers, pressure sores, burns and the sites of intravenous tubes. The infection kills tissue, causing abscesses and pus. A recent study by the Victorian Health Commission found that the only drug remaining that is entirely effective against MRSA is vancomycin, which can cause serious side effects, including deafness and kidney damage. The intensive care ward will probably remain closed until tomorrow. The chairman of the NSW Health Commission, Dr Roderick McEwin, said yesterday at present no other hospitals had been forced to close wards because of infection by golden staph. A motorcycle policeman who was shot in the head had contracted golden staph while in hospital, it was learned yesterday. Senior-Constable Stephen Henry, 26, died early this month after being unconscious for 31 days under intensive care at the Royal Melbourne Hospital. [Text] [Sydney THE SYDNEY MORNING HERALD in English 11 Mar 82 p 2]

CSO: 5400/7542

MISUSE OF PESTICIDES HAS POISONED WORKERS, POLLUTED WATER

Nassau THE TRIBUNE in English 10 Apr 82 pp 1, 13

[Text]

WIDESPREAD misuse of pesticides in the Bahamas has poisoned farm workers and is polluting drinking water.

These startling charges were made by Senior Agricultural Officer John Hedden at a seminar on the environment March 30.

The seminar was organised by The Bahamas National Trust during Conservation Week.

Mr Hedden said the importation and use of pesticides in the Bahamas was completely unrestricted. He called for strict legislation to control the situation.

"The health effects of pesticide poisoning are many," he said. "They include spasms, seizures, kidney and liver disease, haemorrhaging, diarrhoea, lameness, sterility and cancer.

"In the case of a particularly toxic chemical that can be used here by anyone, a single drop on the skin can kill a 150-pound man. And we have no way to treat people since there are no stores of antidotes for these poisons anywhere in the Bahamas."

Mr Hedden cited North Andros where he worked as a horticuluturalist at the government research station for four years as an example of how pesticides can affect the community.

North Andros is one of the country's prime farming districts. It is also the source of a large proportion of the fresh water consumed by residents of New Providence.

Pest control chemicals used on crops are washed into the soil and percolate into the underground fresh water lens where, over a period of years, they may build to toxic concentrations. There is currently no monitoring of water supplies for pesticide contamination in the Bahamas to determine when these levels are reached.

Contamination of the soil itself can affect harvests by making it impossible to grow certain crops through toxic buildup. Misuse of pesticides can affect beneficial animal or insect populations and chemical residues may be left on crops intended for human consumption.

Advertising of insecticides for home use was often misleading, Mr Hedden said, and he urged care in the use of all pest control poisons. Human consumption of insecticides at home by inhalation, through the skin or by eating and drinking contaminated products could also cause serious health effects.

"The problem with most pesticides," Mr Hedden said, "is that they have no place in nature and cannot be broken down by natural processes. They therefore tend to accumulate and form harmful residues. Fresh water is always very close to the surface in the Bahamas and this has serious implications for pesticide use."

Probably the most publicised chemical for its

effect on the environment is DDT which was introduced during the Second World War as a treatment for body lice. The poison was finally banned by the United States in 1973 after research had proved its harmful effects.

These included reduction of bee populations (bees are needed to propagate plants), proliferation of insect pests (by destruction of natural enemies) and decimation of bird and fish populations.

Most significantly it was found that DDT became more and more concentrated as it worked its way up the food chain and was often found in honey, milk and other products consumed by humans. In man, the chemical affected the nervous system and was associated with blood disorders and cancer.

DDT was commonly used in the Bahamas until it was banned by the United States.

Mr Hedden reported that many Bahamian farmers mix concentrated pesticides with the water in their wells, withdrawing the liquid to treat crops. This created a serious hazard, he said, particularly from the combined effects of several chemicals and pollution of the water supply.

"We don't know enough about pesticide poisoning in the Bahamas so we have to protect ourselves from overselves," he said. "I have seen acute cases of posioning among farm workers and very probably deaths have occurred although it is often difficult to distinguish death due to pesticide poisoning from other causes. It is the responsibility of the citizen to demand protection from these dangers."

To minimise the adverse impact of pesticides on the environment, water and land resources should be protected by the controlled use of pesticides.

"The US government has an extensive monitoring system which regulates and restricts pesticide use so that the environment does not suffer serious setbacks and damage to consumers and users is minimised. This does not occur in the Bahamas," he said.

Legislation to control pesticide use in the Bahamas should provide for the licensing of importers and users, public education about the health hazards involved, regular monitoring of the environment and penalties for misuse of dangerous chemicals.

A pesticide control committee has already been formed within the Ministry of Agriculture and Fisheries to investigate the problem and draw up legislative proposals.

CSO: 5400/7544

HEALTH MINISTRY PROVIDES WASTE DISPOSAL GUIDELINES

Bridgetown ADVOCATE-NEWS in English 30 Mar 82 p 9

[Text]

The Ministry of Health has said that the safe and proper disposal of sewage and domestic waste-water is a main feature of Environmental health, and that the prevention of certain diseases and the maintenance of healthy living conditions require that special attention be given to this subject area.

The Health Services (Disposal of Offensive Matters) Regulations, and the Health Services (Building) Regulations, explicitly state the requirements for safe waste-water disposal. The contravention of these regulations or the Health Services (Nuisances) Regulations could result in the offender being fined, imprisoned or both.

The Ministry of Health requires different waste-water disposal facilities depending on proximity to protected water resources, existing subsurface soil conditions and type of proposed development. Septic tanks, grease traps and other facilities may be required.

It is important to note that septic tanks, and grease traps require periodic cleaning if they are to function properly. Septic tanks should be desludged approximately every two to three years, and grease traps (at commercial establishments) sometimes several times per day.

Disposal systems that are improperly designed, improperly constructed and ill-maintained may become problematic. Disposal wells or soakaways may become clogged and incapable of accepting the waste-water. This can lead to well or manholes overflowing with resulting odours, nuisances and other public health threats arising.

In such situations, Septic Tank Emptiers (Vacuum Trunks) can provide temporary relief by lowering the level of waste-water in the wells or soakaways. It is important to realise the source of the problem and make the necessary alterations to prevent the recurrence of these undesirable conditions, such as desludging septic tanks, provision and maintenance of a grease trap, removal of biological growth on the walls of a waste-water well, etc.

The Ministry of Health has realised the waste disposal problems associated with densely populated, low-lying areas, and the Bridgetown Sewerage System was constructed to alleviate some of the problems. A facility to accept the waste from Vacuum Trucks has also been incorporated into the Bridgetown Sewage Treatment Plant.

Furthermore, the feasibility of sewering the south coast, west coast and greater Bridgetown areas is soon to be examined with the assistance of the Inter-American Development Bank.

However, it is important to realise the individual responsibilities of house owners in connection with safe waste-water disposal and the preservation of a healthy living environment.

It should be noted that the reported practice of discharging waste-water into the sea via pumps should not be condoned by any law-abiding person. This practice can severely effect the marine environment, leading to the possible destruction of coral reefs and thereby contributing to the beach erosion and other negative occurrences.

The public should assist the governmental control agencies responsible for environmental protection by refraining from this practice. Public-minded citizens observing such activities should notify Ministry of Health authorities, but, more importantly, they should raise their objections with the person carrying out these practices which directly contravene existing legislation.

Finally, public assistance in the prosecution of such persons would act as a further deterrent to such perpetrators.

The continuance of the proper health conditions in Barbados and the maintenance of a clean environment require the attention and cooperation of all. The proper and safe disposal of waste-water is one area where public cooperation is of the utmost necessity. -

CSO: 5400/7541

ONCHOCERCIASIS PREVENTION NOT ENOUGH, TREATMENT NEEDED

Accra DAILY GRAPHIC in English 7 Apr 82 p 3

[Article by Albert Sam: "The Blind Spot...of the Upper Region"]

[Text]

HOW would you take it if you lived in an area where it is estimated that over 100 people lose their eye-sight every year through no fault of theirs? Certainly you can imagine how gloomy and uncertain life will be!

Take it or leave it, that is precisely the plight of the people living along the Volta Basin and riverine areas of the Northern and Upper Regions. These areas are Onchocerciasis (popularly known as River Blindness) infested areas where the Black fly (simulium damnosum) is causing a lot of havoc to the rural communities.

As I journeyed through the Lawra District along the Kamba River, then to the Tumu District along River Sissili to the Western part of the Navrongo District (Nakong area) and to Pwalugu, Bongo and Nangodi in the Bolgatanga District and finally to the Lamine River basin of Garu-Tempane in the Bawku District, I needed nobody to tell me of the hopelessness of the situation.

Indeed, the people in these Onchocerciasis infested area are living in utmost despair, as over [illegible] of the people including children are either blind or in the process of losing their eye-sight.

It is a pathetic sight to visit places like Kassena[illegible]ga, Kaluri, Adale, Sekoti, Vunga, Nakong and especially Garu where majority of the rural folk is blind. One may ask why the situation continues to deteriorate despite the existence of the World Health Organisation (WHO) sponsored Onchocerciasis Programme.

The answer is very simple. The Oncho Programme has since its inception been pre-occupied with the possibility of eliminating the black fly from the infested areas. The result is that there has been a complete neglect in the area of control and treatment and has thus hardly made any meaningful impact.

The only way out is for the Programme to embark on an intensive public education campaign especially in the infested areas and also operate mobile clinics to treat the victims and all the people since majority of them could be potential onchocerciasis victims.

This is because illiterate as they are, the people would rather readily patronize a programme which would be brought to their door steps than the present programme which is urban based.

Infact the disease is doing a lot of harm to the people and is also a set-back to agricultural development in an otherwise rich farming area in view of the fact that most of the victims who are now blind are reputed to have been very good and progressive farmers.

CSO: 5400/5940

BRIEFS

MEASLES OUTBREAK--About 60 children have died and not less than 50 others are on the sick list following an outbreak of measles at Abrem Berase, near Elmina in the Central Region. This was disclosed by the Omanhene of the Abrem traditional area, Nana Agyemang Kyiriwia Kodie Ababio II, when the Central Regional Secretary, Mr Kofi Acquaah-Harrison visited the area. The Omanhene described the situation as pathetic and attributed it to the absence of a health centre in the town. He therefore appealed to the Regional Secretary to ensure the speedy completion of a health centre under construction at Abrem Agona to cater for the health needs of the people in the area. [Excerpt] [Accra DAILY GRAPHIC in English 1 Apr 82 p 1]

MEASLES OUTBREAK BRING DEATHS--There is an outbreak of measles at Nsuta Kwamang in Ashanti and more than 60 children are said to have died since the beginning of last month. The rate of death is said to be two to three a day. Speaking to a GBC [Ghana Broadcasting Corporation] correspondent the health superintendant of the Kwamang clinic, Mr Owusu Ansah, said between 40 and 50 cases are treated everyday. He explained the situation has gone out of control because vaccines needed for treatment are (?stored) about 16 miles away since there is no electricity supply at Kwamang. The health superintendant is, however, hopeful that with enough vaccines, the situation can be brought under control within 2 weeks. [Accra Domestic Service in English 2000 GMT 4 May 82 AB]

CSO: 5400/5958

BRIEFS

ANTIMALARIA DRIVE--New Delhi, 14 Apr (AFP)--The drug-resistant falciparum strain of malaria has spread from northeast India to many other parts of the country, director of the state-run Indian Council of Medical Reserach (ICMR) Professor V. Ramalingaswami has warned, talking to the PRESS TRUST OF INDIA (PTI) here. He noted this variety of malaria strain had even appeared in the eastern part of Africa, hitherto free of the falciparum strain. The ICMR chief disclosed that his organisation had launched a three-pronged attack to control the incidence of the disease in India. He said the council had stepped up the level of funding for malaria control research and launched 25 schemes in different parts of the country. In addition, two [words illegible] under the ICMR, were devoted to operational aspects of malaria control, ecology and vector control, chemotheraphy and drug resistance. The three-pronged anti-malaria drive consisted of improved vector control, better drugs against chloroquine-resistant malaria, and an integrated environmental control involving "source reduction, naturalistic methods, people's participation and selective use of chemical and biological agents," Prof Ramalingaswami said. [Text] [BK150245 Hong Kong AFP in English 1032 GMT 14 Apr 82]

CSO: 5400/7065

BRIEFS

DIARRHEA IN NORTH SUMATRA--Jakarta, 23 Apr (AFP)--A severe diarrhea epidemic that swept the Lokop area of North Sumatra in the past 2 weeks has claimed dozens of lives, the ANTARA News Agency reported today. The head of Aceh health service, Burhanuddin Yusuf declined to give the exact number of victims saying he was awaiting more detailed reports from the area. Access to the remote Lokop district is difficult, and a joint medical team from Aceh and Jakarta will have to walk some 7 hours to reach the area, ANTARA added. Since the beginning of 1982, three epidemics have hit Aceh Province, but no tally of any victims was reported. The change from the dry to the wet season, between April and August is known as the most dangerous period for the spreading of the disease, the agency said. [Text] [Hong Kong AFP in English 0444 GMT 23 Apr 82 BK]

CSO: 5400/5951

CHOLERA HAS CLAIMED 32 LIVES REPORTS MINISTRY

Nairobi THE STANDARD in English 17 Apr 82 p 3

[Text] THE recent cholera outbreak claimed 32 lives in the country up to the end of last month, the Ministry of Health said yesterday.

The killer disease claimed 16 from Busia, seven in Kisumu, eight in Siaya and one in Kwale.

In a Press statement, the Director of the Division of Communicable Disease's Control, Dr. T. K. arap Siongok, said the deaths were due to the affected people not going for treatment in time but arriving in hospital in moribund state and therefore difficult to save.

"Some of these in fact were already dead when our teams checked the corpses and found that they were suffering from cholera but had not sought treatment," he said.

Dr. Siongok declared that "cholera is treatable and can be easily prevented if the public heed the advice of the Ministry of Health and the administration on this disease".

He said those who died were the ones who delayed at home until they collapsed, when saving of life becomes difficult. "Anybody who seeks treatment promptly will not die," he said.

To prevent further deaths, Dr. Siongok said, "treatment centres have been established in all hospitals and health centres with adequate supplies of drugs stocked there for the treatment of patients.

He said the provision of safe treated water at every home would greatly improve environmental sanitation and check future outbreaks, but noted that "this may not be feasible in our current state of development".

Dr. Siongok appealed to anybody with diarrhoea, with or without vomiting, in the affected areas or even outside them, to report to the health unit nearest him or her and consult the health workers.

He said the ministry was keeping an active surveillance to detect cases and contacts and was treating them quickly before they spread.

Calling for the ban of all public ceremonies until the epidemic is over, he appealed to the community to shun social gathering like wedding and burial ceremonies involving feasting and to reduce movement from one village to another.

The director urged residents to use latrines to ensure that faecal matter does not contaminate foods. He advised on quick refuse disposal to prevent flies and other insects from spreading the disease.

He ordered that during the current epidemic, anybody with complaints identical to cholera should not be allowed to share transport with others until he or she is cured.

CSO: 5400/5942

MINISTER TO TOUR CHOLERA AREAS

Nairobi DAILY NATION in English 12 Apr 82 p 3

[Text]

HEALTH Minister Mukasa Mango will tour the cholera-hit areas of Busia and Siaya districts tomorrow and Wednesday.

During the tour on Tuesday Dr. Mango, accompanied by Ministry officials from headquarters, will hold discussions with local health officials and Busia District Commissioner Zacharia Orwa before inspecting Busia District Hospital.

The team will then proceed to Nambale, Amukura and Khunyangu health centres where some cholera patients are being treated.

On Wednesday the Minister will make a similar tour in Siaya District where he will inspect Siaya District Hospital and see other health centres in the area before going to Kisumu where they will hold discussions with the Nyanza PC.

Meanwhile, medical teams from Nairobi are working round the clock to fight the epidemic. A team of health educators led by Mr. Mark Acham, a senior information officer in the Ministry, have organised film shows at various centres in the district in a campaign against cholera.

Mr. Acham said wananchi were being mobilised to become self-educators on the importance of observing high standards of hygiene. And he has appealed to churches and schools in the area to assist in the campaign.

●The migration of young people to urban areas in search of employment and other social economic activities have brought about a considerable change of lifestyle in the rural areas.

Dr. Mango said this in his speech during the World Health Day celebrations recently.

He said the aged suffer from old age directly or problems of socio-economic nature.

Busia South MP Peter Habenga Okondo has congratulated the Government on initiating anti-cholera measures in his constituency. After a tour of the constituency, Mr. Okondo suggested that in Bunyala South, the Government should increase the number of cholera camps from one to five.

CSO: 5400/5942

CHOLERA ORIGINATED IN UGANDA, SAYS MANGO

Nairobi THE STANDARD in English 8 Apr 82 p 3

[Text] THE recent outbreak of cholera in Busia District originated in Uganda, the Minister for Health, Dr. A. Mukasa Mango, has said.

The Minister said this when he held discussions with the American Ambassador to Kenya, Mr. William Harrop, who called in his office yesterday.

Dr. Mango, who stressed the need for high standards of hygiene as a vital measure to be undertaken by people in the affected areas, said the country needed assistance for a permanent solution to the cholera epidemic.

The Minister said "our main problem is that we share a common border with Uganda because the current cholera outbreak has been traced to Uganda."

The Director of Medical Services, Dr. Karuga Komange, who also attended the discussions, said following the deployment of a team of medical personnel from Nairobi to reinforce those in Western Kenya, the cholera situation in Busia and Siaya was now improving.

He said the Government was capable of dealing with the situation and there was no problem in supplying anti-biotics to the affected areas, ruling out the question of vaccinating people.

Saying that a few cases of the epidemic had been traced in Nairobi, Dr. Komange, who confirmed to the Ambassador that there was a cholera epidemic in the country, however, said the issue had been overplayed.

Dr. Mango and Mr. Harrop discussed the funding of various medical facilities in the country, including the Kitui rural health project for which a US $9 million agreement will soon be signed by Kenya and the U.S. The project will also benefit from funds provided by the Kenya Government.

Meanwhile, at another function, Mr. Harrop told the Minister for Environment and Natural Resources, Mr. Peter Oloo Aringo, his Government would strengthen and increase the Peace Corps programme in the country.

The Minister had asked for Peace Corps assistance in the afforestation programme.

Presently, many of the Peace Corps volunteers work as teachers, others in water technology, women extension services, and fish pond development. Mr. Aringo said *wananchi* were being encouraged to plant village or community forests and would be given bank loans to develop such forests.

Mr. Aringo said the Government could presently produce 38 million tree seedlings annually, but this was not sufficient for the country's afforestation program-

CSO: 5400/5942

BRIEFS

CONJUNCTIVITIS IN BEIRA--A reliable source from the Ministry of Health told NOTICIAS that the conjunctivitis outbreak in Beira and Maputo, still in its initial stage, should not be considered a cause for alarm. According to an explanatory notice from the National Directorate of Medical Assistance, the illness does not prevent normal attendance at work, except in particularly severe cases and in occupations which require continual eye strain. The directorate recommends a visit to the health center at the very first sign of illness in order that the quickest possible diagnosis and correct treatment be made. Conjunctivitis is an infectious and contagious eye disease. It causes an annoying sensation, itching, inflamation of the eyes and eyelids and, at times, pain. According to the above source, conjunctivitis is an endemic disease in this country, appearing at times under epidemic conditions, as is now occurring in some places. [Excerpt] [Maputo NOTICIAS in Portuguese 5 Mar 1982 p 10] 8870

TUBERCULOSIS INCIDENCE DOUBLED IN 1981--According to a document circulated among our editorial staff, combating tuberculosis in Mozambique has priority in the public health national programs. In our country the antituberculosis strategy involves a diversity of health activities, foremost among which are prevention of the disease, forestalling its spread, as well as diagnosis, treatment and supervision of patients and family members. The document noted that in colonial times in Mozambique, tuberculosis was treated as an ambulatory service in designated antituberculosis dispensaries, which did not include all the people; it stressed the need to include the whole community in the strategy of combating this disease. According to the document, the Ministry of Health, through work undertaken last year in the special fields of tuberculosis and leprosy, supervised and aided 60 percent of the districts in our country. However, on noticing this year that the battle plan demanded greater organizational capability, it succeeded in uniting some of the widespread activity. At the end of 1981, it was verified that the number of patients from previous years had doubled; the above-mentioned document added that, in the meantime 72 percent of recorded tuberculosis cases are now under control. Another project which contributed to the effectiveness of the fight against tuberculosis was the decentralization of the health program. This move made possible the expansion of the laboratory network throughout the whole country. According to the document, in 1976 this country had 35 laboratories, a number which last year rose to 122 and by the end of 1982, there will not be a single district without a laboratory. [Excerpts] [Maputo NOTICIAS in Portuguese 30 Mar 82 p 3] 8870

CSO: 5400/5929

BRIEFS

BED BUG BITE CAUSES FEVER--Chandragadhi, April 16--People in Sivagunj village panchayat of Jhapa district have started suffering from fever caused from bed-bug's bite, it is learnt from zonal hospital, reports RSS. Sivajung health post had provided the bed-bugs and blood samples of the patients suffering from the disease to the zonal hospital. [Kathmandu THE RISING NEPAL in English 17 Apr 82 p 4]

MALARIA CASES ON INCREASE--Birgunj, April 17--The number of malaria patients in Nepal has gone up by 15,978 in 1981, reports RSS. Only 159 persons were found suffering from malaria in 1963 after taking sample boold collection from 67 thousand persons under the surveillance programme. After 19 years 15,978 persons are found suffering from malaria after conducting sample survey on 1.397 million persons out of a population of 8.751 million. Out of the malaria patients 3,773 persons had come from outside the country and 624 came from the hills with the altitude below 4 thousand feet. Regionwise, the distribution of malaria patients is stated to be 2,110 in the Eastern Region, 4,759 in the Central Region, 3,558 in the Western Region and 1,483 came from the Far Western Region. The number of malaria patients in the country in 1980 was 13,033. [Kathmandu THE RISING NEPAL in English 18 Apr 82 p 1

MEASLES, WHOOPING COUGH OUTBREAK--Kathmandu, April 19--Doctors and medicines are being sent to Dhading tomorrow morning following an outbreak of measles and hooping cough there, the infectious diseases control division states, reports RSS. Medical services have also been extended to Humla, Jumla, Kalikot, and Mugu where there has been an outbreak of hooping cough, it is stated. Meanwhile another outbreak of measles and hooping cough, in Panchthar, was brought under control three weeks ago. The resources of the local health posts and the services extended by the vaccination project proved inadequate for dealing with the outbreak of hooping cough and measles in Changibazar, Pancha and Dhungamand Dewantar village panchayats in Bhojpur, it is stated. The sivision was not informed about this outbreak, it is also learnt. [Kathmandu THE RISING NEPAL in English 20 Apr 82 p 6]

MEASLES REPORTS--Mahendranagar, April 1--The Kanchanpur district hospital has treated two hundred measles patients in the past two months. According to the hospital sources, six measles patients, on an average, are visiting the hospital daily. Meanwhile, it is learnt that the hospital has run short of medicines necessary for treating the measles. RSS [Text] [Kathmandu THE MOTHERLAND in English 2 Apr 82 p 2]

MALARIA INCREASE REPORTED--Birgunj, April 6--The number of malaria patients is reported increasing in Narayani Zone since the last three years, reports RSS. According to the regional malaria eradication office located here, the malaria patients had totaled 3372 in 1979 but the number soared to 4197 in 1980 and 4998 in 1981. A large number of malaria cases is found in Rautahat district of Narayani Zone, where stagnant water at many places has been a breeding ground for mosquitoes. Meanwhile malaria control activity in Sarlahi and Dhanusha district has been adversely affected by the shortage of malathion, the insecticide used to control mosquitoes. Last year 4,031 malaria patients were found in Janakpur Zone, 450 in Bagmati Zone and 417 in Narayani Zone, it is learnt. [Text] [Kathmandu THE RISING NEPAL in English 7 Apr 82 p 3]

CSO: 5400/5937

INTERNATIONAL EXPERTS ON TUBERCULOSIS MEET NEAR PRETORIA

Ineffectiveness of Campaigns

Johannesburg THE CITIZEN in English 15 Apr 82 p 12

[Selections from reportage by Keith Abendroth]

[Text] A LEADING international medical expert on tuberculosis yesterday questioned the effectiveness of anti-TB campaigns in Africa.

Dr Pierce Kent, of Ireland, said that for the past 50 years and longer the world had been steadily accumulating — "and haphazardly deploying" — a vast, potentially effective, arsenal in the fight against tuberculosis.

"But it can be seriously questioned whether the havoc currently being wrought by this disease throughout the Third World would, in fact, be any worse if these weapons had never been invented," said Dr Kent.

Chain

The basic fact was that the tuberculosis problem was essentially an infection transmission chain — and any attempt to solve the problem must fail, unless this was recognised and unless action was taken to sever the chain completely.

"And this can be done only by systematic use of the weaponry at hand," he said.

Dr Kent was one of the opening speakers at the three-day conference — a conference which will get into full swing today and tomorrow with two in-depth sessions each day on all facets of tuberculosis.

Another speaker, Dr T T Khonje, of Malawi, said that in a population of 6 million in Malawi there were 4 000 new cases of TB diagnosed every year.

This gave an incidence rate of 0,7 per 1 000 and a prevalence of 2-3 per 1 000 — and the figures had not improved in the past 10 years.

A Government TB specialist was appointed in 1989 to integrate and co-ordinate the programme, and to date 45 000 cases had been registered.

But only about a quarter of them had completed treatment, he said.

In addition, recovery from TB in Malawi was seriously hampered by co-existing deseases, such as bilharzia, worm infestations, malnutrition and malaria — while continuing drug shortages contributed to "slow recovery and prolonged convalescence".

Another visiting foreign speaker, Dr Sung Chin Kim, Director of the Korean Institute for Tuberculosis, said that the TB picture in Korea was showing a considerable decrease.

Who's Who in TB Research...

THE WORLD'S foremost experts on the international scourge of tuberculosis met at the Medical University of South Africa near Pretoria yesterday for the first of a three day in-depth conference on the problem.

Among the several hundred delegates attending the conference, are 19 leading world figures in the field, with the official guest list reading like a Who's Who in TB expertise.

For instance, from Hong Kong comes Dr M Aquinas, Medical Superintendent of the Ruttonjee Sanatorium; from Kenya, Dr F J A Aluoch of the Kenya Tuberculosis Centre; from Italy Prof C Grassi, Director of the Clinica Tisiologica; from Canada Prof S Grzybowski, head of the Respiratory Division of the University of British Columbia.

From Korea, Dr Sung Chin Kim, Director of the Korean Institute for Tuberculosis came, and from Ireland, Dr Pierce Kent; from the United States, Dr R H Liss Director of Experimental Cellular Sciences; from Germany, Prof Dr K F Petersen, Medical Director of the Institute fr Laboratoriumsdiagnostik; and from The Netherlands, Dr K Styblow, Research Director of the International Union Against TB.

The conference is being held to commemorate the discoverer of tuberculin, Dr Robert Koch.

WHO Failure Cited

Johannesburg THE CITIZEN in English 16 Apr 82 p 16

[Text] **THE World Health Organisation yesterday came under fire from a top expert on tuberculosis for allegedly "failing to give consistently wise leadership" in the world battle against the disease.**

Dr D Shennan, specialist TB physician of the National TB Control Centre in Swaziland, told the Koch commemorative conference on TB that the world had "failed to grasp the golden opportunity to defeat tuberculosis given by the advent of effective drugs in the 1950s."

He said: "And this is because we have been unable to organise the long course of treatment required."

The problems of organisation had changed somewhat over the past 20 years and now included problems such as drug resistance, the inspanning where possible of the new powerful and expensive drugs; and the failure of the WHO to give the necessary wise leadership.

Another major problem was the breakdown of already existing anti-TB programmes, Dr Shennan said.

However, there had been one change for the better — and this was the recognition of the patients role in understanding the disease and co-operating voluntarily.

The problem in most African countries was the impractibility of introducing — for geographical and financial reasons — fully supervised six-month intensive drug regimens.

But a two-month four-drug supervised treatment followed by a further six months of treatment without supervision had now been shown to be highly effective.

They could be fitted into the existing treatment schedules of many countries without major changes to the organisation.

Dr Shennan said the most important part of a tuberculosis programme was the creation of a structure within which the willing patient could be diagnosed, educated and given full treatment.

"To this can afterwards be added the means to identify and trace patients who default from treatment."

But a central register to monitor the results of treatment and to record new patients was essential if the programme were not to lose momentum through lack of feedback, he said.

Africa's Chronic Health Problem

Tuberculosis--The dreaded consumption of Victorian days--is still a major and chronic health problem in Africa because of cultural and geographical factors.

Top South African specialist on the disease, Dr H Dubovsky, of Bloemfontein, said last night that these factors had offset the effectiveness and benefits of modern medicine in shortening treatment.

The sanatorium era of old had lessons to be learnt in the psychology and philosophy of chronic disability.

Experiences of authors such as Thomas Mann, Robert Louis Stephenson, Katherine Mansfield and Betty MacDonald had shown the necessity of reassurance as a positive therapeutic measure, and that tuberculosis affected the spirit.

Today, the progress and the demands on modern medicine and its training placed less emphasis on the personality of the patient.

An American medical school was now offering an integrated course of medicine and literature to make students aware of the human problems and the psychological effects of the disease.

Minimal Target Among Whites Already Reached

THE target of "minimal frequency" of tuberculosis has been reached among the White population — but will take another 20 to 30 years before being attained among the Coloureds and Blacks.

Mr P S Fourie, head of the Epidemiology Section of the Tuberculosis Research Institute, said that figures show a prevalence rate of five percent and less in Whites and Indians.

But in the Coloured and Black groups, the rates ranged from 10 to 20 percent.

Nor was there much difference in the prevalence in the urban and rural populations in any of the age groups surveyed by the institute, although generally higher rates were found in the lowland and mainly coastal regions than in the highland regions.

It was estimated that there had been an annual overall decrease over the past 25 to 30 years of five percent in the infection rates of Coloureds and Blacks, and seven and eight percent in Indians and Whites.

"In South African Whites this level has already been reached and it is expected to be reached in Asians within the next five to 10 years.

"In Coloureds and Blacks another 20 to 30 years will have to pass before the level is reached," said Mr Fourie.

CSO: 5400/5938

DETAILS ON INCIDENCE OF TB IN SOWETO, JOHANNESBURG GIVEN

Johannesburg SOWETAN in English 2 Apr 82 p 9

[Text] **ONE person's contact with the fast-spreading tuberculosis may produce close to 20 new cases in Soweto alone.**

In view of the socio-economic situation there, the City Health Department appeals to the community to take note of the importance of treating the disease.

The department's personnel often encounter problems with unregistered tenants during home visits. They refuse to give their correct names and addresses out of fear that they may be raided by the administration boards for illegal tenancy.

On the other hand, they may have fallen foul of this highly infectious disease. Personnel use permit files to identify the close contacts of the TB patient.

The senior deputy of the Medical Office for Health, Dr C E Newbury, appealed to the community to co-operate with the department staff as they were merely trying to help decrease the number of victims of the disease.

Another problem area lies with migrant labourers, who are either unidentifiable as a result of influx control or go back to the homelands and discontinue treatment.

Treatment

Dr Newbury says the department should be notified in time so as to arrange for a continuation of treatment of the disease in the homelands.

"If the patient does not take medicine regularly, the tubercule bacillus develops resistance to treatment. A man can develop an allergy to the drug, especially the more powerful drugs," he said.

"Drugs have to be taken in the right combination. We use at least four drugs at one time on a patient, and one needs to note that the department spends about R30 a month on one drug only," says Dr Newbury.

He says treatment is free, adding that his department (which covers Johannesburg) has the best medicine, which is not available in other countries.

Patients are also X-rayed at no cost and for patients in dire financial straits the department provides a feeding scheme comprising milk powder, Maltabella, peanut butter and vitamins in the form of pills.

The Johannesburg SANTA has a total of 2 340 TB cases. Of these 2 146 are black, with about 700 hospitalized.

The signs and symptoms of TB are:

- Persistant cough.
- Tiredness or weakness of the whole body.
- Loss of weight.
- Loss of appetite.
- Night sweats (even when it is cold).
- Pains in the chest.
- Blood-stained spit or coughing up blood.
- Breathlessness.

Should you notice the above, you should contact your nearest clinic.

CSO: 5400/5938

CHOLERA, DIARRHEA PREVENTION SLIGHTED

Colombo SUN in English 6 Apr 82 p 7

[Article by Lucy Thomson]

[Text] In its wake, the prolonged drough has left us with yet another problem the cholera epidemic. While fresh cases keep adding to the tally of the afflicted, many people have succumbed to this fell disease.

Virtually every year, the health authorities have a cholera epidemic on their hands. To what extent have public health officials taken preventive action so that a recurrence of the disease will not plague us? This time, the epidemic has struck the urban folk right in the city of Colombo. The source of the infection is said to be the Kelani River.

Moving sluggishly following the drought, this waterway is an ideal breeding ground for the deadly cholera microbe. The "bridge people" and others like them who are short of water for bathing and cooking purposes depend on the kelani for this precious liquid. They bathe in it clothes are washed in it; grubby children are scrubbed along its banks. The river often serves as a watering point for cattle.

.....NOTICES WITHOUT .....

CLEAN WATER

Small wonder, then, that the water in the river is suspect. Putting up notices to warn the people that the water is contaminated and that they should refrain from using it will not have the desired effect. In the absence of cleaner water, the poor slum-dwellers of the area will continue using the Kelani river—epidemic or no epidemic.

As long as impure water is used by the populace the chances of the epidemic chances spreading to other parts of the country are more than likely. Therefore, the situation is grave and calls for prompt action, leaving no room for complacency. If the preventive side of our health service had received more emphasis and an infusion of larger funds over the last decade, epidemics could have been quelled like smallpox.

SCANT CONCERN

Even a casual observer could not have failed to discern that over the years, Sri Lanka's politicians as well as the people have shown scant concern for the preventive side of the nation's health service. At the same time, it is evident that more money, personnel & services are diverted to the curative side of the health service than is channelled to preventive action. The net result of this exercise is that scarce resources are expended rapidly in setting right what could have been prevented altogether.

It need hardly be stressed that the provision of clean water and sanitation especially to the rural folk in the hinterland of the country who lack even basic amenities, will reduce the incidence of water-borne diseases like cholera typhoid gastro-enteritis hepatitis, dysentery, hookworm, severe diarrhoea.

DIARRHOEA AND DEATH

Many people die, year after year, of these diseases that can easily be prevented. Hundreds of children succumb to diarrhoea. This needless loss of life is often due to parental ignorance and carelessness which makes some mother try various home remedies without seeking prompt medical attention when their children develop diarrhoea. And too often, an infant is rushed to the OPD when dehydration has set in and the condition of the infant is low. Thus, a valuable life is lost even before the little one has a chance to live! While hundreds die, increasing numbers of patients are [illegible] indoor treatment and cured of water-borne diseases which are preventable.

CAUSES FOR DISMAY

In this manner, public money is spent on drugs, linen, food for patients, services etc.

"An ounce of prevention is worth a pound of cure," runs the well-known adage, but anybody taking a long, hard look at Sri Lanka's health services may well throw up his hands in dismay and ask, "Where's the ounce of prevention?"

CSO: 5400/5941

BRIEFS

FILARIA ALARM IN PANADURA--The increase in filaria is causing alarm in the Panadura MOH's division. Many positive cases have lately been detected and a blood test of the residents is being carried out by the MOH's Department. [Colombo DAILY NEWS in English 3 Apr 82 p 1]

CSO: 5400/5941

BRIEFS

DISEASE SPREAD--Thirteen people who are feared to have contracted a form of diarrhea known as (Chapaloze) disease have been admitted into the district hospital. The disease has so far affected 40 people in the district. According to the district medical officer, Dr (Costa Maria), the disease is believed to be caused by bacteria called (Shugela) and spread by flies. The patients complain of stomach ache, followed by diarrhea accompanied by blood discharge. He said during a survey of the areas from where most of the patients come, a health officer in the district found out that the areas were hard hit by water shortage. Most of the patients came from Ngulani and Kurasini. Dr (Maria) appealed to all residents of Temeke to ensure cleanliness of their surroundings. He added that his hospital was still receiving patients suffering from the disease. [Text] [EA300648 Dar es Salaam in English to East Africa 1600 GMT 29 Apr 82]

DEATHS FROM DIARRHEA OUTBREAK--Zanzibar: At least 10 people died and 200 others were hospitalized in Zanzibar following an outbreak of diarrhea. The senior medical doctor at the V.I. Lenin hospital, Dr (Swali), told newsmen yesterday that of the patients who came to the hospital every day, some 20 to 30 received treatment for disease, which broke out 2 months ago. He said that to date the origin of the disease is not known and that investigations are still going on. Dr (Swali) said that some of the patients who visited the hospital had diarrhea while others had haemorrhagic diarrhea. However, the investigation carried out by the V.I. Lenin hospital in conjunction with the Muhimbili hospital has failed to establish whether the disease was dysentery. Meanwhile, the Zanzibar city council together with the department for prevention have banned the import of all fruit and vegetables from outside Zanzibar following the outbreak of Diarrhea. [Text] [Dar es Salaam Domestic Service in Swahili 0700 GMT 29 Apr 82 LD]

BAGAMOYO DISTRICT CHOLERA INCIDENCE--Six people have died from cholera which entered Bagamoyo District on 22 February this year. During this period, a total of 171 people have been stricken by this disease in this district. [Text] [Dar es Salaam UHURU in Swahili 23 Apr 82 p 1]

TARIME CHOLERA--Tarime--One person was admitted at the district hospital here and three others treated and discharged for cholera. The District Medical Officer, Ndugu Sali, has called on the people to observe quarantine regulations. [Text] [Dar es Salaam DAILY NEWS in English 8 Apr 82 p 1]

CHOLERA PERSISTENCE IN DODOMA--Dodoma--The Dodoma Regional Anti-Cholera Committee meeting yesterday concluded that cholera had persisted in the region because of the people's failure to observe quarantines and health precautions. The committee, which met under the Regional Medical Officer, Ndugu J.A. Tesha, blamed Party and Government leaders at ward and divisional levels for lack of seriousness in effecting the quarantines. [Text] [Dar es Salaam DAILY NEWS in English 3 Apr 82 p 3]

CSO: 5400/5939

PUBLIC HEALTH VICE MINISTER ASSESSES MEDICINE SHORTAGE

Hanoi NHAN DAN in Vietnamese 16 Mar 82 p 3

[Article by Pharmacist Nguyen Duy Cuong, Vice Minister of Public Health: "Concerning the Medicine Problem"]

[Text] The present medicine situation is very serious. Many questions have been raised: which medicines do we lack? Why are medicines being indiscriminately sold on the market without being controlled? Why are we not using the very many drugs that we have? How must we solve this problem?

This is, of course, an abnormal situation in life, one that we must clearly understand and accurately evaluate, one concerning which we must take correct measures in order to resolve this problem in a proper and timely manner.

Facts That Must Be Known Concerning Medicines

Before delving into the main issues and searching for basic guidelines for resolving this problem, it is necessary to establish a number of facts.

To begin with, we must have an understanding of the nature and characteristics of medicines.

Medicine is an essential consumer good in the life of the people and a special product that has a decisive impact upon the health and life of man; therefore, there must be special regulations governing the production, management, storage, distribution and use of medicines.

The person who determines how a medicine should be used must be the physician, that is, the person who directly diagnoses and determines an illness. As a result, society's need for medicine is very heavily dependent upon diagnosis and treatment; at the same time, it is determined by the illnesses among the people, the scope of the public health network and the quality of medical examination and treatment. In addition, the knowledge and habits of the people also play a very important role. If there were reasonable and uniform medical treatment charts, if the diagnosis of illnesses was highly precise, if instructions in the use of medication were closely followed, if we avoided "surrounding" an illness, avoided trying to save face by writing prescriptions to suit the requests of patients and avoided the abuse of medicine for many different reasons, the supplying and the use of medicine would be correct and wholesome.

For many years, "closely coordinating traditional national medicine with modern medicine" and "practicing self-reliance while seeking aid from the outside and developing international cooperation," the public health sector has taken positive steps to research, exploit and develop natural drugs and, as a result, has accelerated the production of drugs from domestic raw materials and created a significant source of supply for society.

As regards the raw materials for medicines, four sources are generally cited:

--Natural drugs consisting of plants (natural pharmaceutical materials), animals (animals used to make medicine) and minerals;

--The viscera of animals, especially cattle and hogs;

--Chemicals, especially synthetic chemicals, which are the basis of the pharmaceutical industry, which encompasses the production of raw materials as well as the production of finished pharmaceutical products;

--Antibiotics extracted from fungi and synthetic antibiotics.

In the history of world pharmacology, the first two sources existed at the very outset; the second two sources only appeared in the 20th Century in conjunction with the development of science, technology and heavy industry. As a result not every country has achieved the level of development for providing itself with all the raw materials needed to make medicines or providing its people with an ample supply of medicine.

To meet the needs of the people, every country must formulate a medicine strategy based on its own circumstances; in actuality, however, because the political and economic lines of each country differ, the need for medicine is not met in the same way in each country. As regards meeting the need for medicine, there are three different types of countries:

--The developed capitalist countries in which pharmaceutical houses compete with one another to put tens of thousands of finished products on the market (not all of which are efficacious) and patients can purchase all drugs prescribed for them.

--The developed socialist countries, which have adopted the guideline of using wholesome drugs and meeting the reasonable medicine needs of the people. The variety of products, the quantity of medicines and even the packaging of medicine are consistent with these needs in the spirit of providing medicine at low cost and providing everyone with convenient medical care.

--The developing countries, which are countries that are unable to provide their people with ample medicine. If correct political, economic and social lines are adopted, these countries will build for themselves an independent and autonomous pharmaceutical sector and meet medicine needs by making full use of existing domestic capabilities. If an independent and autonomous line is not adopted,

the medicine problem can only be resolved by importing medicine in accordance with domestic economic capabilities, with the upper classes enjoying the benefit of these imports while the mass of people use national medicine, a large part of which is based on superstition.

Of course, our country is among the first group of the developing countries.

Why Is the Medicine Situation So Serious?

We do, of course, face many difficulties. Neither the quantity of medicine nor the variety of medication fully or promptly meet the needs of the people. There are three main reasons for this:

1. Our sources of medicine are still limited. Over the past several years, we have created sources of medicine in two primary ways: domestic production and imports.

Domestic production has constantly increased over the past several years, especially the production of medicines from domestic raw materials. However, due to the shortage of raw materials, both imported and domestic, due to the lack of secondary materials and packaging material (such as glass) and due to the very rapid rate of population growth, the total output of medicine as well as the output of each type of medicine per capita and the volume of sales have not been maintained at levels achieved several years ago. Moreover, the list of products does not meet requirements, there is an inadequate supply of ordinary products and the quality of some types is not truly maintained.

There are some products that we are unable to produce or cannot produce in adequate quantities, such as special purpose medicines, medicines for emergency treatment, tranquilizers and so forth, consequently, we must import them. However, our foreign currency is limited at a time when international drug prices are constantly increasing and drugs are sometimes unavailable or only available in small amounts on the market, consequently, the quantity of drugs imported has also declined.

2. The distribution of medicines is not being carried out well. We have established a rather widespread distribution network extending from the central to the village and subward levels, a network that operates on a rather uniform basis and has a corps of cadres who are experienced, are rather highly skilled in science and technology and are rather proficient in their profession. However, within the disease prevention and treatment system, subsidization is still widespread; within the business system, the bureaucratic style and authoritarian attitude are rather widespread. Regulations are still haphazard and pose a bother, medicine is not reaching the hands of patients and medicine is not being widely supplied at the most convenient times, during the evening and after work hours.

The variety of products is not good. Ordinary medicines are in short supply or unavailable. Medicine that is sold is not suited to the time of year or the

patient, especially with regard to children. Sometimes, the quality of medicine is not truly maintained.

At many places, distribution is still haphazard, does not fully comply with policies and is not uniform, reasonable or fair among localities and units. In some cases, medicine is distributed on the basis of personal feelings. In some cases, abuses have occurred. Production and business regulations are not fully implemented. The theft of medicine in conjunction with loose market management and profiteering have caused additional difficulties in distribution.

Although we do not have a large supply of medicine, if distribution were improved, the situation would improve and some types of medicine would not be in extremely short supply.

3. Incorrect use.

We have yet to establish complete standards and quotas. The standards and quotas that have been established are outmoded but have not been promptly revised. The system of subsidies has caused persons to demand more and to not practice appropriate economy when using medicine. Each citizen receives two medical examinations each year; if one less pill was taken each time, we could put into storage more than 100 million pills, which is clearly a truly large figure.

As regards physicians, some do not have a full knowledge of diseases or drugs and easily fall into the practice of prescribing very many drugs in order to "surround" an illness. Some physicians, especially at cadre hospitals, who try too hard to save face by writing prescriptions requested by their patients. There are also persons who do not have confidence in medicines produced by us and, as a result, place heavy emphasis upon imported medicine and write prescriptions entirely for imported medicines.

Patients have many unwholesome tastes, purchase medicines at the advice of friends, prescribe drugs for themselves and demand types of medicines based on their own opinions.

Formulating a Medicine Strategy

Such is the serious situation surrounding medicines. We have clearly analyzed its causes. We cannot simply criticize or passively accept this situation and then sit and wait. Nor can we resolve this situation in a piecemeal fashion. Rather, we must take basic and comprehensive steps or, in other words, must adopt a medicine strategy for the next 15 to 20 years.

To begin with, we must establish broad guidelines. In our country, the direction of efforts must be natural pharmaceutical materials: this is the immediate solution to this situation and also our long-range task. There is a rich variety of natural pharmaceutical materials in our country and they grow rapidly in our tropical climate; some types are of high value in the treatment of disease and if we were determined to make appropriate investments in their research and development and

if we established a suitable organization, policies and management structure, natural pharmaceutical materials would yield many scientific and economic returns. This does not mean that we should rely totally upon natural pharmaceutical materials to provide all the medicines needed within the country because, in addition to natural pharmaceutical materials, antibiotics and chemical drugs must still be supplied to medical science and are very basic types of drugs. On the other hand, we also cannot rely upon the exportation of natural pharmaceutical materials to import the other types of drugs without giving attention to developing the chemical drug and antibiotic industries. Our country, although small in size compared to many other countries, has a rather large population (the 15th or 16th largest in the world) and must establish an independent and autonomous pharmaceutical system. We cannot rely upon supplies from foreign countries. Chemical drugs and antibiotics are extremely necessary for humans and livestock, are needed in large quantities and represent a high percentage of the drugs used; they cannot be replaced by any natural pharmaceutical materials, including antibiotics derived from vegetation; therefore, building the chemical drug industry and the antibiotic industry is a task that parallels developing the use of natural pharmacertical materials, even though immediate priority must be given to natural pharmaceutical materials.

Moreover, because chemical drugs and antibiotics require a high level of technology and large, concerted investments, we cannot raise the matter of developing these industries all at once, rather, they must be developed gradually in accordance with existing capabilities and in accordance with the annual growth in our capital and technology. Therefore, developing natural pharmaceutical materials is the foundation and the first step, a step that is consistent with our guideline of practicing self-reliance and making gradual but steady progress.

By following this course, the pharmaceutical sector hopes to realize its very practical dream of helping to bring prosperity to the fatherland, with its immediate goal being to help create the material conditions needed to develop health care, something which usually develops slowly under the circumstances of a poor country, in the spirit of "using natural pharmaceutical materials to support the science of medicine." However, we are determined not to see only economic benefits and relax our effort to achieve the highest possible efficacy in the prevention and treatment of disease, considering this to be our primary goal.

Under these guidelines, the number one concern of the pharmaceutical sector is now to provide medicine to the people. In keeping with this requirement, we must, in view of our present circumstances, perform the following jobs:

1. Create sources of medicine; we advocate that the following three steps be taken at the same time:

a) Continuing to strongly develop the pharmaceutical industry and producing finished products for use in the prevention and treatment of disease. On the one hand, we must replan production installations by product group; on the other hand, we must strengthen the state-operated enterprises (on the central as well as the provincial levels). At the same time, we must accelerate production at

the district pharmacies and create the conditions for the village level and medical treatment units to produce a number of certain types of medicine. Of course, there must be a division of labor among the various levels of treatment in order to avoid duplication. We can permit a number of cooperative teams and skilled persons to participate in the production of some products within a certain number of fields under the guidance and control of the state public health agencies and using entirely domestic raw materials.

As regards the raw materials for state-operated production, in addition to a number of types of chemicals or antibiotics that we must continue to import because we have not achieved self-sufficiency in them, the primary source must continue to be domestic, natural drugs.

We must attach full importance to the efficacy of medicines and constantly endeavor to improve their quality. We must give special attention to establishing a reasonable variety of products, one consisting primarily of the ordinary types of medicine used in the treatment of disease, especially the types needed by the people.

We estimate that, by taking this course, the products produced on all levels, both by mechanized and manual means, will meet approximately 50 to 60 percent of the needs of the people.

c) Restoring the practice of preparing drugs on the basis of prescriptions. Before they reach their present level of development, the production and supplying of medicine to each patient in the industrially developed countries underwent a period of development in which medicine was prepared on the basis of prescriptions, a practice that was very popular 40 or 50 years ago. We cannot do what they did nor should we imitate them in order to try to produce finished products which our industry does not have the capabilities, either in terms of raw materials or pharmacology, to produce. However, the preparation of medicine on the basis of prescriptions from such semi-finished products as ointments and pastes derived from vegetation will help us to make full use and develop upon the strongpoints of domestic pharmaceutical materials.

The preparation of medicine would be widely carried out at hospitals and within the precinct and district pharmacies. Doctors would then have an opportunity to use domestic pharmaceutical materials as semi-finished products. Pharmacists would be able to apply the knowledge of their profession. An industry preparing medicines from natural pharmaceutical materials would actually take shape and develop, thereby laying the groundwork for the extraction industry. This second course of development is projected to meet 20 to 30 percent of needs.

c) Developing and expanding the movement to raise and use the plants and animals of traditional medicine on the village level. To date, we have more than 3,000 villages and nearly 100 districts that have met the standard of successfully implementing the plan to raise and use the 35 species of plants and animals to make medicines to efficaciously treat seven common diseases and ailments, thereby

markedly reducing the use of western drugs. This result has been verified by the Medical Science General Association and many collectives of pharmacists. We will expand and develop upon this result, strengthen the old villages and districts and develop many new villages and districts, thereby meeting another 20 to 30 percent or more of the people's needs. These drugs are primarily used in the form of medicinal decoctions and teas while some are used in the form of ointments, plasters, pills and powders. This is the only way to meet the medicine needs of the people in the countryside.

2. Strongly develop the raising of medicinal plants.

We have a very large advantage in our favor due to the fact that our country has a very wide variety of medicinal plants. Relying upon folk experiences, we have investigated and found 1,200 species of plants that can be used to make medicine. However, our country is not large, vegetation is not uniformly distributed and even a few medicinal plants, whether cultivated or growing wild, require a large amount of area, consequently, the output picked and purchased each year is limited. Moreover, due to the lack of a good organization and due to policies that are less than complete, the cultivation of main crops of medicinal plants has developed slowly, even the cultivation of peppermint, a medicinal plant to which we have given special attention but which has not been widely cultivated. Not all of the plants being grown are being purchased. For this reason, the existing sources of natural pharmaceutical materials are inadequate to meet the requirements of the pharmaceutical industry. The number of plants growing in the wild has markedly declined and some species are nearly non-existent due to the expansion of land clearing operations and the serious destruction of forests. Besides using medicinal plants in their raw form, grinding them into powders, cooking them into ointments or fermenting them, we have achieved success in extracting the essence of a number of plants, such as strychnine from the seed of the nuxvomica plant, ru-tin [Vietnamese phonetics] from Saphora japonica plant, bec-be-rin [Vietnamese phonetics] from the vang dang plant and so forth; however, we have not developed their production much on an industrial scale. We have achieved success with a number of plants but the majority are plants used to make "medicinal herbs" and are not the plants that are ingredients of basic or ordinary medicines; therefore, they have not had much of an impact upon the pharmaceutical industry. Moreover, scientific research has not developed uniformly, technical forces are not well coordinated and not many plants have been researched in a basic and comprehensive manner in order to reach a full scientific conclusion concerning them. New drugs are not subjected to systematic and methodical clinical testing; therefore, they are not widely used by physicians; on the other hand, because they have not undergone expanded testing, we generally experience confusion when it comes to incorporating them in production on a large scale. For this reason, formulas that are good or might be good go unused for many years.

(To be continued)

7809
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LONG RANGE SOLUTIONS TO MEDICINE SHORTAGE PROPOSED

Hanoi NHAN DAN in Vietnamese 17 Mar 82 pp 3, 4

[Conclusion of Article by Parmacist Nguyen Duy Cuong, Vice Minister of Public Health: "Concerning the Medicine Problem"]

[Text] The above situation explains why the production of medicines from natural pharmaceutical materials has not kept pace with requirements. We should not think that because we have pharmaceutical materials we immediately have medicines. To produce a finished product, it is necessary to go through very many stages, from establishing the properties, characteristics and effects of a drug to the form in which it is prepared and the method by which it is introduced into industrial production. Even the cultivation and processing of natural pharmaceutical materials involves many very complex economic and technical questions.

We should also not think that if we only concentrate on the production of a few products from natural pharmaceutical materials we can obtain all types of drugs through exports and imports. In fact, exporting drugs is not a simple matter. It is necessary to have products that are truly efficacious, that are produced on the basis of specific results of scientific research and that satisfy, in terms of both their content and form, the requirements and tastes of foreign countries; at the same time, it is necessary to find suitable markets. In the immediate future, we can research the extraction of essential oils of various types and the processing of natural pharmaceutical materials. Essential oils and processed natural pharmaceutical materials are types of products that can be exported and which are consistent with present circumstances. However, the main factor continues to be practicing very close cooperation with the fraternal countries in the field of medicinal plants, a practice which benefits both parties, enables us to develop upon our strongpoints and enables us to learn and develop that which we do not have. In the future, we surely must endeavor to export many types of drugs produced from domestic, natural pharmaceutical materials.

When talking about natural pharmaceutical materials, it is first of all necessary to mention raising and planting pharmaceutical materials under a plan and with a specific division of labor among the various levels of treatment. Each village should set aside 2 or 3 hectares of land primarily to raise the 35 species of plants and animals to meet the daily needs of families and stations, with surplus

drugs being sold to meet other needs (the needs of the pharmaceutical industry producing semi-finished products and so forth).

On the district and provincial levels, it is possible to raise main crops on a larger scale at agricultural cooperatives and possibly organize state farms for this purpose; at the same time, every effort must be made to encourage private cultivation if citizens have the necessary conditions. This should be carried out in conjunction with zoning areas, determining which main species of plants and animals should be raised on the basis of the strength of each area, thereby avoiding the practice of trying to raise every species, and giving attention to establishing a division of labor for specialized cultivation. At the same time, plans must be adopted for purchasing, harvesting, protecting and restoring these species of plants and animals. The crop production plan absolutely must be carried out in conjunction and be balanced with the production plan, with priority given to drugs for common ailments (such as influenza, coughing, diarrhea, etc.).

The strongpoints of each locality are those species of plants and animals used to make medicine that are of high economic value, are of high value in the treatment of disease and are found in many areas within the locality in rather important quantities.

On a nationwide scale, we must give attention to the strategic species of plants and animals, to the special product plants and to the species of plants and animals with which we cooperate with the fraternal countries and which must be raised on a large scale. Regardless of the line of medical treatment, close coordination between the public health sector and the agricultural and forestry sectors, and even with the army, is essential.

As regards ordinary medicines, specific formulations will be established on the basis of research results; on this basis, each locality will determine which species of plants and animals must be raised and determine the amount of farmland needed or the number of animals needed. For example, "bach dia can" is produced from Angelica anamala and both "dia lien" and "cat can" have been determined to be efficacious cold medicines. On the basis of an average of 30 pills (which have a specified content) per capita per year and a yield of 1 ton of Angelica anamala per hectare, it is possible to compute the amount of land that must be put under the cultivation of Angelica anamala each year for the population of a province. Localities that do not have all the natural pharmaceutical materials they need can enter into joint businesses with other localities.

In many respects, natural pharmaceutical materials are a strongpoint; however, they are still a potential and many appropriate and effective steps involving purchases, cultivation, research, processing, decoction and so forth must be taken in order to make this potential reality, produce material products and produce specific medications.

3. Accelerating the building of the chemical pharmaceutical and antibiotic industries.

in other countries, the chemical pharmaceutical industry has developed after and on the basis of the development of the basic chemical industry. The circumstances in our country are completely different, consequently, we cannot wait but must make positive preparations for the development of the chemical industry before the petroleum industry has begun to be developed.

We have made an attempt to produce a number of chemical raw materials under crude conditions but the majority of them have been secondary materials; the types that constitute the major percentage of our medicines, such as fever reducing drugs (aspirin, phenacetin and paracetamon), sulfamides, vitamins and so forth are not being produced. Extraction is being done but it is still underdeveloped. We have virtually no man-made chemicals. It can be said that we have not focused appropriate efforts on this field, our determination is still lacking and investments in this field have been characterized by much confusion.

In the immediate future, we must endeavor to restore those products that were produced in previous years while providing incentive for the enterprises (central as well as local), pharmaceutical institutes and colleges and units that have the necessary conditions to participate in the production of chemicals from the surplus products of industrial enterprises and by manual or semi-mechanized methods. Along with this, some units will be assigned major projects involving the completion of the procedures for producing a number of chemical pharmaceuticals within a specific period of time. For example, under this 5-year plan we will assign one unit the task of producing sulfamides on a small scale, another unit the task of producing aspirin, etc. At the same time, we will accelerate the extraction of chemicals in which we have an advantage (such as caffeine from tea leaves, strychnine from the seed of nuxvomica, etc.) or from natural pharmaceutical products acquired through cooperation with friendly countries. This is a very necessary form of practice in preparation for the future chemical pharmaceutical industry.

As regards antibiotics, we must still continue the work of the units specializing in searching for and producing new antibiotics; at the same time, we must initiate research into the production of traditional antibiotics (penicillin, tetracycline and so forth) on a laboratory scale and eventually on a medium and large scale. This is an inevitable step and will also provide us with experience for producing industrial antibiotics in the next 5 years, when we have the necessary production plants. As is the case with chemical pharmaceuticals, the guideline regarding antibiotics is to proceed on both feet, to engage in both rudimentary and modern production, to practice self-sufficiency while seeking cooperation with foreign countries.

4. Reorganizing and improving the distribution and use of medicine: to begin with, it is necessary to consolidate the network, especially the network of organizations on the basic line of treatment. In the spirit of establishing very good district bases, establishing precinct and district pharmacies is a pressing requirement, one that must be met at an early date. The precinct and district pharmacies will perform all three functions: providing guidance in the cultivation and purchasing natural pharmaceutical materials; producing a number of common drugs that do not require a high level of technology and producing these drugs on a small-scale and under rudimentary conditions; and distributing medicine. Their

task will include supplying high quality, efficacious drugs in a rapid and timely fashion and in a manner consistent with the purchasing power of the people and the pharmacy's function as a center. As a result, in addition to the system of basic public health stations that participate in the task of distributing drugs within large areas, primarily in the countryside, in the remote hamlets and villages, especially in the mountains, the pharmacies can organize a network of agents to insure the distribution of ordinary drugs to the people so that they always have a convenient and readily accessible source of drugs.

On the central level as well as the provincial and district levels, it is necessary to establish a distribution council and implement a fair and reasonable mode of distribution, with efforts concentrated on the medical treatment facilities in order to meet the requirements of each locality and be consistent with the capabilities of the country. Because we have many types of medicine and many new names of medicine made from domestic raw materials which, although efficacious, are not well known by the people, propagandizing and introducing medicines by means of many different methods are an area of work to which importance must be attached. Together with establishing unified medical treatment charts so that every physician is highly conscious of using domestic drugs and using them in a reasonable manner, instructing the people in how to use drugs and how to avoid bad and harmful habits is a practice that must be expanded and maintained on a regular basis.

We must focus our efforts on market management. Due to the special nature of medicines, the state must unify their management, especially in production and distribution. Here, we can confirm the tremendous results achieved by the public health sector in transforming the pharmaceutical production and distribution sector in the southern provinces and in establishing a unified system of state-operated pharmaceutical enterprises and corporations. We should not think that the temporary difficulties we face are due to the fact that we abolished the system of private capitalist drug production. We have very much respect for the knowledge and capabilities of scientific and technical cadres, regardless of where they were trained, and fully utilize all of these forces in developing the pharmaceutical sector in accordance with the common plan but we cannot, in the name of providing incentive for production, return to private production, which is contrary to the socialist construction line in our country.

The purchase and sale of medicine should also be put under the unified management of the state; in remote places, this can be done by organizing agents as mentioned above. In order to tightly manage the medicine market, some localities can, under certain conditions, grant private or collective licenses to persons who possess specialized skills to purchase and sell, at specified, suitable prices, drugs received from foreign countries. The persons selling these drugs must fully post the prices of their product, are fully responsible for the quality of the drugs they sell and are under the control of the local public health agency in every aspect of their business. In this spirit, these persons can be considered a type of special agent, not the "western drug salesmen" of the old system.

As regards natural pharmaceutical materials, their purchase, sale and circulation must also be controlled in accordance with a specific code of regulations and in a manner dependent upon each product.

3. Intensifying scientific research and cadre training: each of the positions mentioned above concerning natural pharmaceutical materials, production and distribution must be based on specific scientific and technical foundations. Research efforts will be focused primarily upon determining which types of ordinary drugs can be produced from domestic raw materials, such as medication for influenza and coughs, medicine for diarrhea, cancer drugs, medicine for women and medicine for children. Research must answer the following questions: which plants must we use to treat these illnesses? What are the effects of the drugs from these plants? What are their pharmaceutical properties, toxicity and side-effects? What is their clinical effectiveness? In which form and dosage should these drugs be administered? How are they decocted? Where can they be raised and picked? Then, it is necessary to conduct research to put recognized projects into everyday use, which is a weakness of ours at this time. There are many medicinal plants, drugs and drug formulations that have been verified as good through practice but which we have been unable to produce on a large scale and have not introduced to many people, consequently, they are not in widespread use or have become export products. There are many reasons for this situation, the most important ones being the failure to make appropriate investments in applied research, the lack of good coordination between production and research and the bureaucratic mechanism in management. We must take determined steps to correct the present decentralization and the somewhat liberal, haphazard nature of research and truly involve ourselves in the matters of greatest importance, as this is the only way to resolve the problem of researching and initiating the production of one drug at a time. Of course, we must first re-examine all old research projects and utilize those projects that are of practical value.

Because of this decentralization, cadre training has not focused on meeting a number of specific requirements. It is necessary to rapidly take an inventory of the corps of cadres and formulate cadre planning and plans that are consistent with the overall strategy in order to develop a well coordinated corps, possibly one that concentrates on important areas, with some sections of cadres delving deeply into each specialized field, some specializing in specific plants and animals, in crop and livestock production, in the extraction of essential oils, in chemical pharmaceuticals, microorganisms, etc. Of course, attention must also be given to training persons who are specialized in the economic activities of the pharmaceutical sector. And, it is especially necessary to utilize cadres in the areas for which they are trained and to focus efforts on training cadres who show prospects.

4. Developing and strengthening the organization in a manner consistent with the requirements of building and developing the pharmaceutical sector as an economic-technical sector that occupies a significant position within the national economy:

Of current importance is the need to clearly define the relationship between medical science and the science of pharmacology, which is a matter that many medical and pharmaceutical cadres have raised. Medicine and pharmacology have a common objective: to protect and improve the health of man. The science of medicine diagnoses diseases and prescribes drugs; pharmacology finds the necessary drugs and insures the supply of drugs. Medical science and the science of pharmacology are closely linked to each other, they support and are dependent upon each other. Without good coordination between them, the effort to protect and improve the health of man will not achieve the desires results.

we ordinarily consider the activities involved in the science of medicine, which include disease and epidemic prevention, medical examinations and medical treatment, to be professional activities and consider pharmaceutical activities, which include raising pharmaceutical materials and producing and distributing drugs, to be economic activities. However, there are some persons who maintain that the pharmaceutical sector is encountering difficulties because it is a sector of economic activities that is managed by a professional sector. In fact, the Ministry of Public Health has been assigned two functions by the state: a professional function, preventing and treating disease, and an economic function, producing and distributing drugs, both of which must be carried out at the same time in an organic relationship with each other. If the pharmaceutical sector has failed to meet requirements, it is because the Ministry of Public Health has failed to fulfill its functions, which include establishing close coordination between medical science and the science of pharmacology and rapidly building a complete pharmaceutical system. Therefore, to correct this situation, we must, on the one hand, establish components within the ministry that specialize in economic work and establish within each integrated unit a component specializing in pharmaceuticals corresponding to the component specializing in medical science; on the other hand, we must unify pharmaceutical activities in one center, thereby avoiding decentralization or internal antagonisms. On a nationwide scale, it is necessary to establish federations of enterprises producing pharmaceuticals and equipment; each province should have a federated enterprise performing all three functions of producing, purchasing-cultivating and distributing pharmaceuticals; on the district line, there should be pharmacies that have the same three functions but which perform them on a smaller scale.

[illegible] certain provinces, consideration has been given to organizing pharmaceutical production into a specialized sector that is not under the management of the Ministry of Public Health but which does reflect a close relationship between the science of medicine and the science of pharmacy; this has been done in [illegible] in which the state has unified the purchasing and sale of drugs, thereby ensuring that medical science and the science of pharmacy (its distribution aspect) are always closely linked to each other.

The above are basic areas concerning which we think we must have a unified concept and the six essential measures that we boldly present, measures which we feel must be taken in a well coordinated, consistent, positive and continuous manner as a general strategy for the next 3 to 4 five-year plans in the hope of resolving the problem of providing a full and convenient supply of medicine in our country.

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INOCULATION PROGRAM FOR CHILDREN INITIATED

Hanoi QUAN DOI NHAN DAN in Vietnamese 16 Mar 82 p 4

[VNA News Release: "Expanded Inoculation by Age Group Program for Children Implemented"]

[Text] This year, in keeping with the expanded inoculation by age group program for children proposed by the World Public Health Organization, our country's public health sector is gradually implementing this inoculation program for children on a nationwide scale.

Under this inoculation program, children, primarily children 1 year of age or less, will receive monthly vaccinations against six diseases: diptheria, tetanus, whooping cough, measles, tuberculosis and polio.

The public health sector has fully prepared the various types of vaccines and supplied a number of pieces of equipment for refrigerating vaccines to the various inoculation facilities so that children are inoculated correctly and on schedule.

The public health sector is endeavoring to make this expanded inoculation program a nationwide program by the end of 1988 and gradually wipe out six dangerous diseases of children: diptheria, tetanus, whooping cough, measles, tuberculosis and polio.

7809
CSO: 5400/5933

HEALTH MINISTRY: TRAVELLERS NO LONGER NEED CHOLERA SHOTS

Harare THE HERALD in English 22 Apr 82 p 1

[Text] People travelling in and out of Zimbabwe do not need cholera vaccinations, a Ministry of Health spokesman said yesterday.

Recent outbreaks of cholera in South Africa, Zambia, Mozambique and Swaziland have led to rumours that people travelling between these countries and Zimbabwe must produce cholera vaccination certificates.

The spokesman emphatically denied this, saying that as far as his ministry was concerned the epidemic in South Africa posed no threat to this country.

"It has never been proved that the vaccination prevents the transmission of cholera and up to 40 percent of vaccinations fail," he said.

As it was mainly people in the lower socio-economic groups that ran the risk of contracting cholera, there was no reason why airline users should have vaccinations. "It's hardly likely that rural people will be found at airports," he said.

"We are not aware of any cholera cases in this country, although there may be isolated cases in Manicaland."

Meanwhile, a bulletin from the World Health Organisation expresses fear that the "d[illegible]ed" disease is reappearing.

It says th[illegible]enth cholera pandemic (worldwide epidemic), which started in 1961, is still rampant. Although treatment of the disease had been improved it was still to be feared.

Important measures for prevention included the separation of drinking water from that used in sanitation, the thorough cooking of food using clean water, and the proper disposal of waste material.

Recent published reports said that at least 1000 cholera cases were being treated in Natal every week, while 39 Zambians had died of the disease since last December.

CSO: 5400/5950

CUNDINAMARCA FOOT-AND-MOUTH DISEASE

Bogota EL TIEMPO in Spanish 26 Mar 82 p 13-A

[Article: "Hoof-And-Mouth Disease Found in Three Cuncinamarca Municipalities"]

[Text] The government of Cundinamarca last night absolutely prohibited the mobilization of cattle within the areas of the municipalities of Zipaquira, Tabio, and the police superintendency of El Rosal (Subachoque), because of an outbreak of hoof-and-mouth disease.

The Secretariat of Agriculture and the Colombian Land and Cattle Institute (ICA) fully ascertained the appearance of the disease, right after an investigation and analysis made by experts of those organizations.

The preventive measures adopted by Governor Enrique Rueda Ribero includes the prohibition of transportation of cattle and the celebration of fairs in those localities, and also the isolation of the afflicted animals, the disinfection and vaccination of the cattle in the farms of the area, where more than 1,800 doses of medicine have been administered.

After pointing out that the afflicted animals had not been vaccinated during the last cycle, the governor exhorted the cattle owners of the region to prevent vehicles, cattle, and outside persons from coming to the farms, and suggested that milk be delivered at the gateways of the farms, in order to avoid the spreading of the disease.

At the same time, Rueda Ribero urged the proprietors and administrators of farms to inform the ICA and the officials of the Cundinamarca Secretariat of Agriculture and Development of the presence, or the suspicion of the appearance, of the disease.

8255
CSO: 5400/2133

UNKNOWN DISEASE KILLING HUNDREDS OF DUCKS ON LOLLAND

Copenhagen BERLINGSKE TIDENDE in Danish 11 Apr 82 p 6

[Article by Finn Knudstrup]

[Text] While thousands of cows are being destroyed on Fyn as a result of hoof-and-mouth disease, hundreds of ducks are now dying on Lolland from a duck infection--a disease previously unknown in this country.

Hatchery owner Boye Pedersen of Godsted near Sakskobing has already lost 1000 ducks and he told BERLINGSKE SONDAG that each morning he removes between 80 and 100 dead ducks. The Orbygaard Hatchery has been quarantined but the ducks have neither been killed nor vaccinated, even though the disease is contagious.

Boye Pedersen explained: "The disease causes the ducks to become lethargic and they die a few hours later. The whole thing began a month ago, but the authorities have been very slow to detect the presence of the illness--and have done nothing besides quarantining the property. I have sick birds walking around and thousands of eggs. Every day I am 5000 kroner poorer--but aside from that, it is sad to see the sick birds and know that it is only a question of hours before they will be dead."

Farm Quarantined

District veterinarian Heje Pedersen of Nykobing Falster said that the final diagnosis has not yet been made--and that there are no regulations covering the uncommon disease in this country. The veterinarian said to BERLINGSKE SONDAG:

"When it comes to hoof-and-mouth disease, there are strict rules to refer to--but this is something entirely new. But we must be careful about comparing the duck infection with hoof-and-mouth disease. Because the duck disease is not spread through the air but only through droppings. Therefore it is enough to quarantine the property and the people who look after the birds. The farm lies quite far from others involved in poultry production, so we could never have conditions similar to those affecting the cattle owners on Fyn."

Spread From the South

The district veterinarian believed the duck disease had reached the farm on Lolland from the south--possibly from wild ducks on their migration route. The disease has not been found in Denmark before. But it is known in Holland where they combat it with vaccination.

Hatchery owner Boye Pedersen: "It still amazes me that the days just go by--that they do not have vaccine sent here from Holland. Something simply must be done. My ducks are dying like flies--and just think what would happen if the disease does manage to spread after all."

6578
CSO: 5400/2136

FUNEN FARMERS DELAYED IN REPORTING FOOT-AND-MOUTH DISEASE

Copenhagen BERLINGSKE TIDENDE in Danish 16 Apr 82 p 3

[Article by H. C. Kiilerich and Ole Schmidt Pedersen]

[Text] Two brothers at Fraugde in Funen have apparently had hoof-and-mouth disease at their farm for a week without reporting it to the authorities. The police is investigating the matter, which is being considered most gravely.

Kjeld Pedersen, a police superintendent of the Odense Police, tells BERLINGSKE TIDENDE:

"The investigations seem to indicate that there is something to it. So far, I cannot either confirm or invalidate the claim that the owners of the farm have been keeping the incident secret for a week. However, I should like to stress that the owners have themselves reported the case--apparently, with a week's delay."

Kjeld Pedersen does not wish to discuss the penalty for the two brothers if it turns out that the suspicion proves correct.

"We have got no precedent, but we regard the matter with the greatest seriousness. Everybody is under obligation to report cases of hoof-and-mouth disease immediately."

District Veterinarian Officer Knud Thorup cannot say if the hoof-and-mouth disease of the two farmers' stock has been passed on to other stocks. In addition, he only knows of the case through rumors.

"However, under all circumstances, it is objectionable if the disease has been kept secret. It is obvious that all cases must be reported immediately," Knud Thorup says.

From the farm of the two brothers, the nearest case of hoof-and-mouth disease is [illegible] kilometers away.

Minister of Agriculture Bjørn Westh will now ask the police to investigate rumors that several farmers in Funen have themselves fetched vaccine against hoof-and-mouth disease in West Germany and have themselves vaccinated their stocks against the disease. Rumors of such illegal vaccinations have circulated in Funen during the last 5 days.

Next Friday, at 8 p.m., the Danish TV will focus on the treatment of the hoof-and-mouth disease in Funen. This will take place in the TV News program, in which Minister of Agriculture Bjørn Westh will participate.

7262
CSO: 5400/2135

FEAR GROWS THAT FOOT-AND-MOUTH DISEASE IN ZEALAND

Copenhagen BERLINGSKE TIDENDE in Danish 15 Apr 82 p 1

[Article by H. C. Kiilerich]

[Text] At the same time as still another case of hoof-and-mouth disease was ascertained yesterday at Ferritslev in Funen, the fear grew that the disease has spread to Zealand.

The Cattle Slaughter House of the Slagelse Cooperative Slaughter House as well as the Slagelse Export Slaughter House, Inc., yesterday stopped accepting any further animals. So far, the slaughtering has been stopped till Thursday morning. The reason is a suspicion that a bull calf from a stock at Næsby Beach near Slagelse may have contracted the dreaded disease. Samples from the calf have been sent in for examination. The results of the tests will become available this morning.

Poul Bojsen, manager of the Holbæk and Slagelse Cooperative Slaughter Houses, tells BERLINGSKE TIDENDE:

"We hope that this is false alarm. But the rules of the game have to be complied with, and we have closed the slaughter house at Slagelse pending the results of the tests."

Birgitte West of the Veterinary Department states:

"The farmer from Slagelse has been told to keep his animals indoors. The milk from the farm must not be taken away from the farm, and the people living at the farm must avoid contact with others. The same thing applies to the veterinarian who was in contact with the calf."

The case in Funen is the 17th case. A stock of 55 cows and 3 sows was killed immediately, and the number of animals which have had to be killed on account of the hoof-and-mouth disease now amounts to 3,668 animals.

The Veterinary Department is of the opinion that the infection was carried to the farm through the milk float--a practice which has been criticized in many quarters. However, it is not found that there is reason to make the rules and regulations any more stringent.

Officials of the Ministry of Agriculture are agreed and maintain that the decision not to vaccinate still applies

7262
CSO: 5400/2135

MOI ORDERS OFFICIALS TO KILL RABID DOGS

Nairobi DAILY NATION in English 3 Apr 82 pp 1, 32

[Text]

PRESIDENT Moi has authorised administration officials and wananchi to kill rabid dogs known as T9.

The dogs, which migrated to Kenya from a neighbouring country a few months ago, are reported to have a deadly disease that is incurable. The President osberved with concern and said that the dogs bite was fatal.

He authorised local people to use all practical means including arrows to eliminate the dogs. The dogs have been spotted in various parts of the Rift Valley Province, Kisii and other adjacent areas.

President Moi was addressing thousands of wananchi from all walks of life at Barsamoi in his Baringo Central constituency where he led them in the construction of gabions to arrest soil erosion.

Turning to soil conservation efforts the President commended wananchi in the district for having taken steps to reduce the rivers from flowing fast at various points. He urged them to continue with the exercise throughout the year.

Talking on the importance of conserving soil for the benefit of future generations the President urged wananchi to start a tree planting campaign immediately.

"You should not wait until the 16th of this month when the official tree planting day will be launched," the President advised.

He called on them to intensify their efforts to preserve forests such as the local Katimok Forest.

President Moi appealed to the people in Baringo District to plant as many crops as possible so that they can feed themselves as well as the neighbours.

He advised those with outstanding loans to repay them as soon as possible so that others may also benefit from the same facilities. He noted that wananchi in the area were keeping too many goats which contributed to the destruction of vegetation. He called on such people to sell some of their animals.

The President said that Barsamoi Primary and High schools as well as the people of the area may eventually be able to get water for domestic use as a result of the building of gabions. The President directed the assistant chiefs in the area to plant grass and trees at the site where he and other leaders planted trees on Thursday.

CSO: 5400/5942

USE OF PESTICIDE ON TSE TSE FLY SEEN CREATING ENVIRONMENTAL PROBLEMS

Nairobi DAILY NATION in English 7 Apr 82 p 12

[Text]

A $2 BILLION, 40-year programme to eradicate the tsetse fly in tropical Africa is likely to cause severe environmental problems, according to an article in the current issue of *Ambio*, the journal of the human environment published by the Royal Swedish Academy of Sciences. The programme, which is sponsored by the United Nations Food and Agriculture Organisation, is using "hard" pesticides banned in most Western nations in an attempt to open up some seven million square kilometres of tropical forest and woodlands for cattle grazing.

But the article's author, Marcus Linear, argues that the net production of beef may actually decline if the programme is successful because of climatic and ecological changes resulting from the destruction of the last major forested area in Africa. "In effect", he writes, "the tsetse fly is keeping Africa green".

Some species of the tsetse fly carry microscopic parasites known as trypanosomes which are transmitted through its bite to humans and to domestic animals, especially cattle. In man, the parasite causes *trypanosomiasis*, or sleeping sickness; in cattle it causes a frequent fatal disease known as '*nagana*'.

The fly infests a broad belt of territory across the central latitudes of Africa, and while the rate of infection in humans is relatively low — unofficial statistics indicate about 7,000 cases of *trypanosomiasis* per year and about 350 deaths — cattle are much more vulnerable, and the presence of the tsetse makes large areas of Africa unsuitable for raising cattle.

In 1973 the FAO, in conjunction with a number of bilateral aid donors — the most prominent and active being the British Overseas Development Agency and the German Agency for Technical Co-operation (GTZ) — and many of the multinational chemical companies, began a programme to eradicate the tsetse fly. The programme, which is expected to cost $2 billion spread over 40 years, relies mainly on heavy spraying of infested areas with pesticides such as dieldrin and similar dangerous compounds which have been prohibited or are tightly restricted in almost all Western nations because of their persistence in the environment and their extreme toxicity.

The use of such "hard" pesticides immediately pollutes the local environment, with severe consequences for the animals in the forests and for the local inhabitants who use them for food.

But the *Ambio* article argues that if the eradication programme is successful, it will result in the ultimate elimination of the last remaining tropical forest in Africa, as cattle breeders gradually clear the land to provide pastures for their animals.

In turn, the destruction of the forests on such a vast scale would almost certainly result in changes in climate

CSO: 5400/5942

BRIEFS

DISEASE KILLS CHICKENS--Hundreds of chickens have died in West Pokot District from a unknown disease. Farmers in the district have appealed to the Government to increase staff and transport facilities so that they could be reached and served adequately in times of need. A woman who lost over 100 birds in three days criticised Livestock Ministry officials for being unreliable. She claimed that she made several reports at the Ministry's offices at Kapenguria urging the officials to come and determine the cause of the disease. She was promised that she would be attended to but nobody came and the birds kept dying, she said. Meanwhile, in Kapsabet cattle owners have been warned of prosecution if they did not take their stock for dipping in Mosop Division, Nandi District. The Nandi District veterinary officer, Dr. Kamau showed a list of defaulters at a baraza saying: "It is the wish of the Government that Mosop was declared a free grazing area and I will deal with those people mercilessly." He urged assistant chiefs to supervise dipping and ensure that the exercise was successful. He also called on chiefs to use their act to ensure that all animals were being treated accordingly. Dr. Kamau disclosed that Mosop alone had 100,000 head of cattle adding that if the defaulters failed to treat their animals, many of them risked death. He said his office had enough drugs for the animals and that there was no excuse why many of them should not be treated. [Text] [Nairobi DAILY NATION in English 12 Apr 82 p 4]

CSO: 5400/5942

BRIEFS

HEMORRHAGIC SEPTICEMIA SPREADING--Mahendranagar, April 13--Haemorrhagic septicemia, a deadly animal disease, is reported spreading in some parts of Kanchanpur district, reports RSS. Local veterinary hospital has already sent its teams to control the disease. Meanwhile a large number of farmers are bringing their animals to the hospital for vaccination against the disease. [Text] [Kathmandu THE RISING NEPAL in English 14 Apr 82 p 4]

CSO: 5400/5937

BRIEFS

ANTHRAX AREAS NAMED--The Government has declared some areas anthrax-infected. In Friday's Government Gazette, the following were named: Lubimbi and Manjolo in the Binga district; Bembezi Forest Land, Fingo location, Inkosikazi, Inyati and Ntabazinduna in the Bubi district. Buhera district; Nata and Samenani in the Bulalima-Mangwe district; and the Chipinga district. Chenjiri and Sanyati in the Gatooma district; Gokwe district; Lower Gwelo, Vungu and Inyanga district. Chirau, Magondi, Umfuli, Zvimba, Zowa and Chitomborgwizi in Lomagundi district; Lupane district; Makoni district; Mutasa district; Nkai district. Gulati and Kumalo in Matobo district; Gwai and Tjolotjo; Silobela and Zhombe in Que Que district. Chimanda in Rushinga district; Selukwe area in Selukwe district; Runde in Shabani district; Esiphezini, Matopo and Mzinyatini in Umzingwane district; Maranke in Umtali district; and Wankie. [Text] [Salisbury THE HERALD in English 12 Apr 82 p 5]

HALT ANTHRAX SPREAD--The step taken by the Government in declaring some areas anthrax-infected, was to pave the way for an effective vaccination campaign against the disease, says Dr Alec Wilson, director of the Veterinary Services Department. However, he added, the measure was now a mere formality as the anthrax situation had improved dramatically. He was commenting on a Herald report listing countrywide areas affected by anthrax. Dr Wilson said the campaign would in no way affect the Cattle Rescue Operation launched by the Government in collaboration with the Cold Storage Commission to move drought-affected livestock to areas with better grazing. "Anthrax is not much of a problem in this country," he said. "The vaccination campaign is aimed at wiping out germs which can live in the soil for many years." Anthrax first broke out in Matabeleland during the war and spread quickly but the vaccination campaign mounted at the end of the war had received "good co-operation". Hurdles were being overcome in areas where, "probably because of inadequate communication", Government veterinarians had met with problems, Dr Wilson said. "We started the vaccination campaign as soon as each area became accessible, particularly where people expressed a wish to have it done," he said. "The Government notice was designed to speed up the exercise in areas still giving trouble. By and large we are doing quite well." [Text] [Salisbury THE HERALD in English 16 Apr 82 p 14]

CSO: 5400/5936

BRIEFS

WEED THREAT--Careless aquarium owners are probably responsible for spreading a new noxious weed in WA. Small infestations of the weed, parrot's feather or Brazilian water trefoil, have been found in the metropolitan area. The Agriculture Protection Board says that the weed is a threat to agriculture. Its masses of leafy stems can break off and block irrigation canals and pumping machinery. It is also an ideal breeding ground for mosquitoes and aquatic snails. The APB's chief officer, Mr Neil Hogstrom, said yesterday that the weed, a native of South America, was a rooted aquatic plant which grew near the banks of slow moving rivers and in the mud at the bottom of shallow ponds. It had pale green brittle stems with groups of six feathery leaves at each node. Mr Hogstrom asked people who see a plant that looks like parrot's feacher to call the PAB on 367 0111, extension 468. [Perth THE WEST AUSTRALIAN in English 20 Mar 82 p 11]

ANTI-ANT DRIVE--A Statewide campaign aimed at eradicating Argentine ants will continue this week at Neerabup Lake in Wanneroo. The Minister for Agriculture, Mr Old, yesterday inspected the latest assault on what is said to be the world's worst ant pest. Department of Agriculture workers could spend some time at the 200-hectare swamp which is densely covered with ant-infested bullrushes, says a spokesman for the Minister. Heptachlor is one of several the department-approved materials used for spraying. "It has a short field life and no residual effect. The spray is the same used to combat silverfish," the spokesman said. About 400 hectares at Herdsman Lake and 150 hectares at Balcatta are earmarked for treatment. The department's entomology branch has sprayed 350 hectares of Lake Pinjar and 200 hectares of Lake Carabooda already. Yanchep national park was closed for two days earlier this month for ground-level spraying. Since the department's eradication campaign started 28 years ago, 28,317 hectares have been treated with chemicals at a cost of $3.2 million. Mr Old regards the campaign as essential. "Internationally the Argentine ant is regarded as the world's worst ant pest and is of major economic importance," Mr Old said. "In Western Australia it poses a direct threat to the continuation of our exports of primary produce such as wool, wheat and mineral ore. "It also ranks very highly as an orchard pest because it tends aphids and scale insects, thereby promoting mould. This in turn contaminates leaves and fruit, which involves the grower in expensive control measures and fruit cleaning. [Perth THE WEST AUSTRALIAN in English 23 Mar 82 p 50]

CSO: 5400/7545

BRIEFS

ACEH CROP PLAGUE--Banda Aceh, 12 Apr (ANTARA)--A new crop plague, the so-called "gerayat" caterpillar, which has attacked over 3,500 hectares of ricefields in Pidie Kabupaten Aceh, since last March has now been successfully fought off, according to the provincial agricultural chief, Rusli Arifin today. He explained that the "gerayat" caterpillars waged their war against the paddy at night concentrating on the stalk causing the ripening paddy grains to fall off the next morning. [Excerpt] [BK140339 Jakarta ANTARA in English 0921 GMT 12 Apr 82 BK]

CSO: 3400/5951

MAJOR PLANT DISEASE OUTBREAK FEARED

Colombo THE ISLAND in English 21 Apr 82 p 2

[Article by Norman Palihawadana and Peter Balasuriya]

[Text]

Customs have warned against the possibility of major plant diseases breaking out here as a result of the relaxation of quarantine laws at the Colombo Airport on fruits and plants brought into the country.

Although there are two quarantine officers on duty at the airport, passengers bringing in apples and other fruits have been permitted to take them out without the usual fumigation against pests.

It had been the practice hitherto to compulsorily fumigate fruits and plants at the Plant Fumigatorium of the Colombo Port before they are released.

Earlier packages were sent to the Fumigatorium for tests by the Customs.But three months ago the Fumigatorium sent two Quarantine officers to the airport for fumigation purposes.These two officers have now given written instructions to Customs officers to release these items if brought in small quantities.

This was being done, it is stated, due to the lack of facilities for fumigation at the airport.

A Customs spokesman said that most Indians brought in a large number of apples allegedly for sale in Colombo..When they came in batches of ten and fifteen the number amounts to almost a commercial consignment.

It will be recalled that some time back when fumigation was relaxed, Sri Lanka was affected by one of the most disastrous coconut diseases caused by the red insect pest Promecotheca Cumingi..Customs fear that it may not be long before another virulent disease affects fruits in the country unless immediate action was taken to tighten quarantine laws.

CSO: 5400/5995

BRIEFS

GRAIN-EATING QUELEA QUELEA--Tabora--Large groups of the grain-eating quelea-quelea birds have invaded Igunga District in Tabora Region, attacking millet fields, the Regional Party Secretary, Ndugu Pius Msekwa, has said. Ndugu Msekwa told SHIHATA yesterday that the birds were also in Nzega District where they have caused extensive damage to millet fields. Ndugu Msekwa explained that it was now difficult to fight the birds effectively because the lack of a spraying aircraft. On the "Scania" grain borders Ndugu Msekwa said the actellic two per cent drug had proved effective against the pests and that peasants stored their maize so that it took full effect. [Text] [Dar es Salaam DAILY NEWS in English 3 Apr 82 p 3]

SHINYANGA REGION INSECT INFESTATION--Insects which damage corn and which were initially in Kahama District have now spread throughout Shinyanga Region. The Shinyanga Region agricultural officer, E.S. Jaggadi, told SHIHATA that almost 40 percent of the corn stored in Kahama District has been attacked by these insects, 10 percent in Shinyanga District, and 2 percent in Maswa and Bariadi districts. Jaggadi said that recently these insects have begun to attack even vegetation in the fields in Kahama District. The office of agriculture in Shinyanga Region has requested a total of 700,000 shillings to purchase 35 tons of the insecticide "Actelic" which should be sufficient to combat the insects in the region. [Text] [Dar es Salaam UHURU in Swahili 21 Apr 82 p 5]

CSO: 5400/5965

BRIEFS

RICE CROP DAMAGE--In Bac Thai Province, 70 percent of the 10th month rice crop was heavily damaged by pests; however, as a result of cultivating the crop well, output almost met the plan quota and represented an increase of thousands of tons compared to the previous season. During the 4th quarter, many sectors within the province intensified their emulation effort to do as much in one quarter as had been done in the first three quarters of the year and complete the state plan for the year on cutting firewood and export goods. The delivery of timber to the state exceeded the plan quota and marine products production developed rather well. [Excerpt] [Hanoi NHAN DAN in Vietnamese 16 Mar 81 p 1] 7809

QUANG NINH HARMFUL INSECTS--Some 90 percent of the vegetation protection cadres in Quang Ninh Province have attended course for eliminating harmful insects. There are four kinds of harmful insects that have ravaged many ricefields in the province namely yem borer, leaf roller, planthopper and ground beetle. Thanks to their active preventive action, peasants in Yen Hung District in early April saved more than 650 hectares of ricefields from being ravaged by the insects. [Hanoi Domestic Service in Vietnamese 2300 GMT 16 Mar 82 BK]

HAIPHONG HARMFUL INSECTS--More than 4,000 hectares or 10 percent of winter-spring rice acreage in Haiphong municipality have been ravaged by harmful insects. The municipality has provided many districts and cooperatives with insecticide and spray equipment to eliminate these harmful insects, especially in their nascent stage. [Hanoi Domestic Service in Vietnamese 2300 GMT 15 Apr 82 BK]

CSO: 5400/5951

STUDY OF CROP-KILLING SCLEROTA DESCRIBED

Salisbury THE HERALD in English 14 Apr 82 p 5

[Excerpt]

SOMEHOW the study of plant diseases does not strike one as a particularly enthralling occupation.

But time spent with Florence Chanakira is certain to change that opinion. For here is a young woman who makes plant pathology sound the exciting, challenging, awesome job it is.

Her enthusiasm for tackling the health problems of plants is contagious . . . and one finds oneself examining the dinner-time brussels for any suspicious sprouts.

Although Miss Chanakira is a woman of many interests and talents, her major concern is her research into Sclerotinia sclerotiorum — in lay terms, stem rot.

As a research student at the University of Zimbabwe — where she is doing a MPhil leading to a PhD — she has spent the past year studying the killer disease which attacks oil seeds and ordinary vegetables.

The daughter of a businessman and a nursing sister, Florence's interest in plants stems back to her biology classes at St John's High School and the Dominican Convent in Salisbury.

She was awarded a Commonwealth Secretariat scholarship and in 1976 was accepted by the University of Lagos to do a BSc honours in botany.

She followed up her degree with a post graduate diploma in education and a certificate course in computer science.

She accepted a Finnish government scholarship to study microbiology at the University of Helsinki, but after only a few months she decided it would be more sensible to do her post graduate work in Zimbabwe.

"I think if you are going to work in agriculture, you want to deal with the same climatic conditions in your research that you will be later working with," she said.

Florence (27) started at the university here last year. She joined the department of crop science in the Faculty of Agriculture, becoming the only student doing plant pathology.

It was suggested she tackle the problem of stem rot, a plant disease first noticed in this country in 1965 and identified by the Government as a serious problem in 1979.

ENGROSSED

Under the supervision of Dr Desiree Cole, the only oil seed plant pathologist in the country, Florence is the only person working on the disease in Zimbabwe and is totally engrossed in her subject.

"Let me explain the disease," she offered with her boundless enthusiasm. "My main research is centred on ground nuts, soya beans and sunflower, all of which are oil seeds.

"The disease has two stages in its life cycle — by affecting plants through spores or through mycelia, which is like a mould.

"The sclerotia is a highly resistant body when climatic conditions are right for it and it can germinate and infect large areas of crops. In the United States, the disease accounts for the largest number of losses in ground nuts."

Florence has planted crops at two farms, one in Marandellas and the other on the Enterprise Road, and at Henderson Research Station.

She has cultivated the disease — which attacks the nutrients in plant stems — and is working on chemicals to control it as well as varieties of crops which are strong enough to withstand it.

She is also investigating which weeds are susceptible to the disease as these could lead to infection of a newly-planted field of crops.

"I've been working very hard, like seven days a week, but I've really enjoyed it."

She has had to grin and bear the difficult nature of working on agricultural projects, such as the peculiarities of the elements, and has found perseverance an important attribute.

"There are times when you get terribly frustrated," she admitted. "Like when you are desperately trying to cultivate the disease and it won't take on your crops — but is growing wild on the farmer's surrounding fields.

PROBLEM

"What keeps you going is knowing that here is a problem causing untold damage to the country's crops. You want to do something to help."

One of the aspects of her work is to increase farmer-awareness of the disease and its dangers and Florence is willing to help and advise anyone.

The project is long-term and the first results of Florence's test are only now starting to come in. The research, however, could take years.

"The stubborness of the disease means that even if we did find a variety that was resistant, after a few years with the changes in fungus these too could become infected.

"So it's an on-going thing. There will always be problems . . . but it is a fascinating and challenging job trying to find solutions."

Although plants have a special place in Florence's life, she ensures that they don't completely crowd out her many other interests.

"I love outdoor life so much, I don't think it would be possible for me to be without it," she said.

A keen athlete, she represented the University of Lagos in the 1 500 metres. However, a heavy work schedule here has so far prevented her from becoming involved in university athletics.

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May 21, 1982